



STIC Search Report

EIC 1700

STIC Database Tracking Number 180208

TO: Kriellion Sanders
Location: REM 10D31
Art Unit : 1714
February 27, 2006

Case Serial Number: 10/073780

From: Usha Shrestha
Location: EIC 1700
REMSEN 4B28
Phone: 571/272-3519
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Search Notes

Requester's Full Name: Kriellian Sanders Examiner #: 60941 Date: 2/22/06
Art Unit: 1714 Phone Number 30 21122 Serial Number: 10673780
Mail Box and Bldg/Room Location: New 10031 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Bloom Resistant Benzotriazole UV absorbers and composition

Inventors (please provide full names): Wood et al

Earliest Priority Filing Date: 2/1/2000

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for benzotriazoles of attached claims

Please note the proviso on page 6.

SCIENTIFIC REFERENCE BR
Sci & Tech Inf. Cntr.

FEB 23 2006

Pat. & T.M. Office

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: for

NA Sequence (#) _____

STN 5879-65

Searcher Phone #: _____

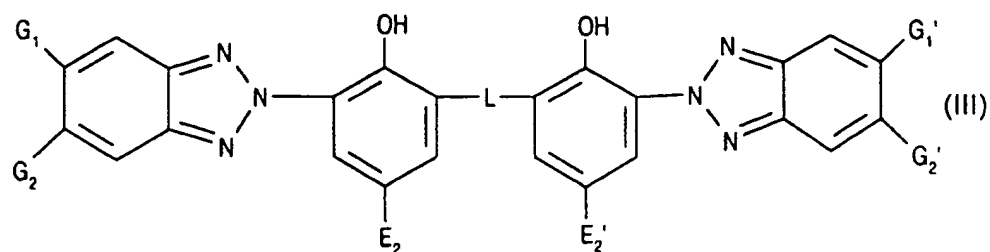
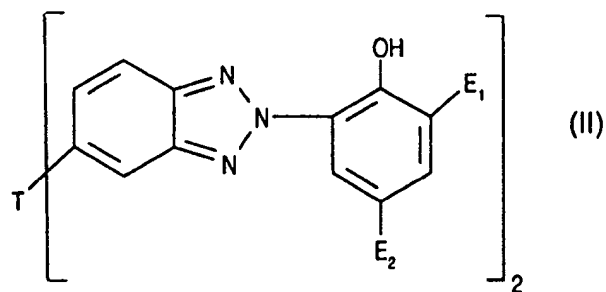
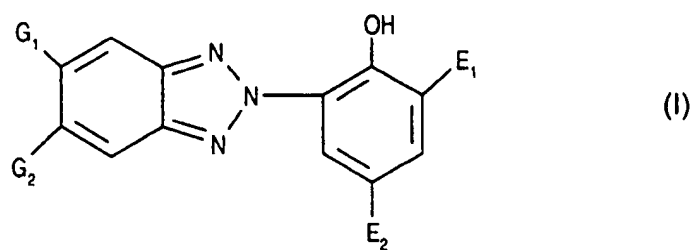
AA Sequence (#) _____

Dialog _____

In the Claims

1-29. (canceled)

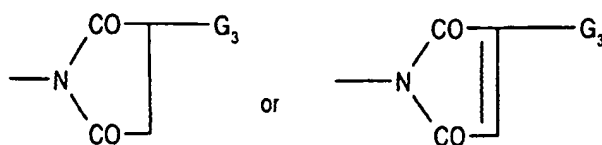
30. (currently amended) A compound of formula I, II or III



wherein

G_1 and G_1' are independently hydrogen or halogen,

G_2 and G_2' are independently hydrogen, halogen, nitro, cyano, E_3SO- , E_3SO_2- , $-COOG_3$, perfluoroalkyl of 1 to 12 carbon atoms, $-P(O)(C_6H_5)_2$, $-CO-G_3$, $-CO-NH-G_3$, $-CO-N(G_3)_2$, $-N(G_3)-CO-G_3$,



G_3 is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms, phenyl, or said phenyl or said phenylalkyl substituted on the phenyl ring by 1 to 4 alkyl of 1 to 4 carbon atoms; or G_3 is T_1 or T_2 .

E_1 is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 24 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms, phenyl, or said phenyl or said phenylalkyl substituted on the phenyl ring by 1 to 4 alkyl of 1 to 4 carbon atoms; or E_1 is alkyl of 1 to 24 carbon atoms substituted by one or two hydroxy groups; or E_1 is the group $-(CH_2)_m-CO-X-T_1$ where m is 0, 1 or 2; or E_1 is the group $-(CH_2)_p-X-CO-T_2$ where p is 1, 2 or 3,

E_2 and E_2' are independently straight or branched alkyl chain of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms, phenyl, or said phenyl or said phenylalkyl substituted on the phenyl ring by one to three alkyl of 1 to 4 carbon atoms; or E_2 and E_2' are independently said alkyl of 1 to 24 carbon atoms or said alkenyl of 2 to 18 carbon atoms substituted by one or more $-OH$, $-OCOE_{11}$, $-OE_4$, $-NH_2$, $-NHCOE_{11}$, $-NHE_4$ or $-N(E_4)_2$, or mixtures thereof, where E_4 is straight or branched chain alkyl of 1 to 24 carbon atoms; or said alkyl or said alkenyl interrupted by one or more $-O-$, $-NH-$ or $-NE_4-$ groups or mixtures thereof and which can be unsubstituted or substituted by one or more $-OH$, $-OE_4$ or $-NH_2$ groups or mixtures thereof; or E_2 and E_2' are independently $-(CH_2)_m-CO-X-T_1$ or $-(CH_2)_p-X-CO-T_2$, or E_4 is T_1 or T_2 .

X is $-O-$ or $-N(E_{16})-$,

E₁₆ is hydrogen, C₁-C₁₂-alkyl, C₃-C₁₂-alkyl interrupted by 1 to 3 oxygen atoms, or is cyclohexyl or C₇-C₁₅aralkyl,

E₁₁ is a straight or branched chain C₁-C₁₈alkyl, C₅-C₁₂cycloalkyl, straight or branched chain C₂-C₁₈alkenyl, C₆-C₁₄aryl or C₇-C₁₅aralkyl; or E₁₁ is T₁ or T₂,

E₃ is alkyl of 1 to 20 carbon atoms, hydroxyalkyl of 2 to 20 carbon atoms, alkenyl of 3 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms, aryl of 6 to 10 carbon atoms or said aryl substituted by one or two alkyl of 1 to 4 carbon atoms or 1,1,2,2-tetrahydroperfluoroalkyl where the perfluoroalkyl moiety is of 6 to 16 carbon atoms,

L is alkylene of 1 to 12 carbon atoms, alkylidene of 2 to 12 carbon atoms, benzylidene, p-xylylene, $\alpha,\alpha,\alpha',\alpha'$ -tetramethyl-m-xylylene or cycloalkylidene, and

T is -SO-, -SO₂-, -SO-E-SO-, -SO₂E-SO₂-, -CO-, -CO-CH₂-CO-, -CO-E-CO-, -COO-E-OCO- or -CO-NG₅-E-NG₅-CO-,

where E is alkylene of 2 to 12 carbon atoms, cycloalkylene of 5 to 12 carbon atoms, or alkylene interrupted or terminated by cyclohexylene of 8 to 12 carbon atoms;

G₅ is G₃ or hydrogen,

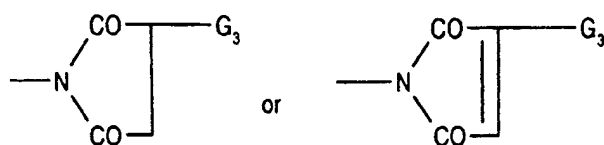
T₁ is straight or branched chain alkyl of 25 to 100 carbon atoms, ~~or said alkyl substituted by one hydroxyl group and interrupted by one oxo moiety~~, or a mixture of such alkyl moieties; or

T₁ is -(R-O)_n-R-OG_x where R is ~~ethylene~~, propylene, trimethylene, 1,2-butylenes or tetramethylene, and n is 6 to 49 so that the total number of carbon atoms in T₁ is at least 25,

G_x is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms, phenyl, or said phenyl or said phenylalkyl substituted on the phenyl ring by 1 to 4 alkyl of 1 to 4 carbon atoms,

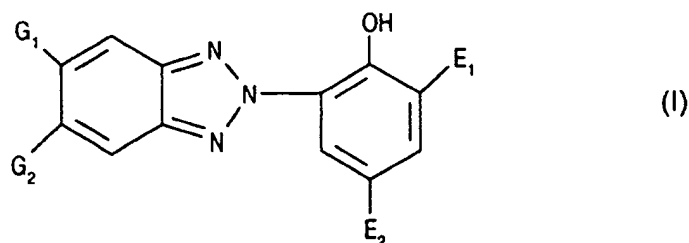
T₂ is straight or branched alkyl of 23 to 100 carbon atoms; and

with the proviso that at least one of E_1 , E_2 and E_2' is a group $-(CH_2)_m-CO-X-T_1$ or a group $-(CH_2)_p-X-CO-T_2$ or at least one of G_2 and G_2' is a group $-COOG_3$, $-CO-G_3$, $-CO-NH-G_3$, $-CO-N(G_3)_2$, $-N(G_3)-CO-G_3$,



where G_3 is T_1 or T_2 .

31. (currently amended) A compound according to claim 30 of formula I



wherein

G_1 is hydrogen,

G_2 is hydrogen, chloro, fluoro, cyano, E_3SO- , E_3SO_2- , $-COOG_3$, CF_3 , $-CO-G_3$, $-CO-NH-G_3$ or $-CO-N(G_3)_2$,

G_3 is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or phenyl; or G_3 is T_1 or T_2 ,

E_1 is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 24 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or phenyl; or E_1 is the group $-(CH_2)_m-CO-X-T_1$ where m is 0, 1 or 2; or E_1 is the group

$-(CH_2)_p-X-CO-T_2$ where p is 1, 2 or 3,

E_2 is straight or branched alkyl chain of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or phenyl; or E_2 is said alkyl of 1 to 24 carbon atoms or said alkenyl of 2 to 18 carbon atoms substituted by one or more -OH, -OCOE₁₁, -OE₄, -NHCOE₁₁, -NHE₄ or -N(E₄)₂, or mixtures thereof, where E_4 is straight or branched chain alkyl of 1 to 24 carbon atoms; or said alkyl or said alkenyl interrupted by one or more -O-, -NH- or -NE₄- groups or mixtures thereof and which can be unsubstituted or substituted by one or more -OH, -OE₄ or -NH₂ groups or mixtures thereof; or E_4 is T_1 or T_2 ,

X is -O- or -N(E₁₆)-,

E_{16} is hydrogen,

E_{11} is a straight or branched chain C₁-C₁₈alkyl, C₅-C₁₂cycloalkyl, C₆-C₁₄aryl or C₇-C₁₅aralkyl; or E_{11} is T_1 or T_2 ,

E_3 is alkyl of 1 to 20 carbon atoms, hydroxyalkyl of 2 to 20 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or aryl of 6 to 10 carbon atoms,

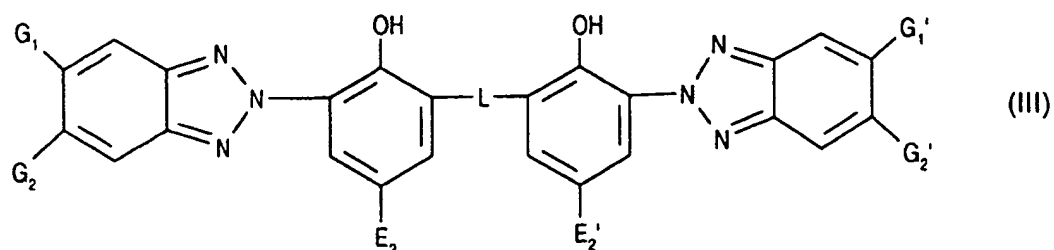
T_1 is straight or branched chain alkyl of 25 to 70 carbon atoms, ~~or said alkyl substituted by one hydroxyl group and interrupted by one exa moiety,~~ or a mixture of such alkyl moieties; or

T_1 is $-(R-O)_n-R-OH$ where R is ~~ethylene,~~ propylene, trimethylene or tetramethylene, and n is 6 to 49 so that the total number of carbon atoms in T_1 is at least 25, and

T_2 is straight or branched alkyl of 23 to 70 carbon atoms; and

with the proviso that at least one of E_1 and E_2 is a group $-(CH_2)_m-CO-OT_1$ or a group $-(CH_2)_p-O-CO-T_2$, or G_2 is a group $-COOG_3$, $-CO-G_3$, $-CO-NH-G_3$ or $-CO-N(G_3)_2$ where G_3 is T_1 or T_2 .

32. (previously presented) A compound according to claim 30 of formula III



wherein

G_1 and G_1' are hydrogen,

G_2 and G_2' are independently hydrogen, chloro, fluoro, cyano, E_3SO- , E_3SO_2- , $-COOG_3$, CF_3 , $-CO-G_3$, $-CO-NH-G_3$ or $-CO-N(G_3)_2$,

G_3 is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or phenyl; or G_3 is T_1 or T_2 .

E_2 and E_2' are independently straight or branched alkyl chain of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or phenyl; or E_2 and E_2' are independently said alkyl of 1 to 24 carbon atoms or said alkenyl of 2 to 18 carbon atoms substituted by one or more $-OH$, $-OCOE_{11}$, $-OE_4$, $-NHCOE_{11}$, $-NHE_4$ or $-N(E_4)_2$, or mixtures thereof, where E_4 is straight or branched chain alkyl of 1 to 24 carbon atoms; or said alkyl or said alkenyl interrupted by one or more $-O-$, $-NH-$ or $-NE_4-$ groups or mixtures thereof and which can be unsubstituted or substituted by one or more $-OH$, $-OE_4$ or $-NH_2$ groups or mixtures thereof; or E_4 is T_1 or T_2 ,

E_{16} is hydrogen,

E_{11} is a straight or branched chain C_1 - C_{18} alkyl, C_5 - C_{12} cycloalkyl, C_6 - C_{14} aryl or C_7 - C_{15} aralkyl; or E_{11} is T_1 or T_2 ,

E₃ is alkyl of 1 to 20 carbon atoms, hydroxyalkyl of 2 to 20 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or aryl of 6 to 10 carbon atoms,

L is alkylene of 1 to 12 carbon atoms, alkylidene of 2 to 12 carbon atoms, benzylidene, p-xylylene, $\alpha,\alpha,\alpha',\alpha'$ -tetramethyl-m-xylylene or cycloalkylidene,

T₁ is straight or branched chain alkyl of 25 to 70 carbon atoms, or said alkyl substituted by one hydroxyl group and interrupted by one oxa moiety, or a mixture of such alkyl moieties; or

T₁ is $-(R-O)_n-R-OH$ where R is ethylene, propylene, trimethylene or tetramethylene, and n is 6 to 49 so that the total number of carbon atoms in T₁ is at least 25, and

T₂ is straight or branched alkyl of 23 to 70 carbon atoms; and

with the proviso that at least one of E₂ and E₂' is a group $-(CH_2)_m-CO-OT_1$ or a group $-(CH_2)_p-O-CO-T_2$, or at least one of G₂ and G₂' is a group $-COOG_3$, $-CO-G_3$, $-CO-NH-G_3$ or $-CO-N(G_3)_2$ where G₃ is T₁ or T₂.

33. (previously presented) A compound according to claim 30 which is

(a) C₂₀-C₄₀alkyl 3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 35-51°C;

(b) C₂₀-C₄₀alkyl 3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 58-63°C;

(c) C₂₀-C₄₀alkyl 3-(5-chloro-2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 33°C;

(d) C₂₀-C₄₀alkyl 3-(5-chloro-2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 57-67°C;

(e) C₂₀-C₄₀alkyl 3-(5-trifluoromethyl-2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate;

(f) C₂₀-C₄₀alkyl 3-(5-phenylsulfonyl-2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 42°C;

(g) C₂₀-C₄₀alkyl 3-(5-phenylsulfonyl-2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate
melting at 65-74°C; or

(h) C₄₀-C₆₀alkyl 3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate.

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:29:54 ON 27 FEB 2006

=> d his ful

FILE 'HCAPLUS' ENTERED AT 08:14:20 ON 27 FEB 2006

L1 2 SEA ABB=ON PLU=ON US20020111404/PN

FILE 'REGISTRY' ENTERED AT 08:15:01 ON 27 FEB 2006

L2 80 SEA ABB=ON PLU=ON (286471-17-8/BI OR 286471-25-8/BI
OR 352520-91-3/BI OR 83573-67-5/BI OR 84268-36-0/BI OR
106-95-6/BI OR 112-92-5/BI OR 122586-52-1/BI OR
141-82-2/BI OR 150686-79-6/BI OR 154958-19-7/BI OR
15802-18-3/BI OR 1843-05-6/BI OR 207738-91-8/BI OR
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73936-91-1/BI OR 77876-06-3/BI OR 87113-78-8/BI OR

L3 STR

L4 STR L3

L5 50 SEA SSS SAM L4

L6 STR L4

L7 STR

L8 STR L6

L9 50 SEA SSS SAM L8

L10 6056 SEA SSS FUL L8

L11 26 SEA ABB=ON PLU=ON L10 AND L2

SAV L10 SAN780/A

L12 25 SEA SUB=L10 SSS SAM L7

L13 STR L7

L14 9 SEA SUB=L10 SSS SAM L13

L15 STR L13

L16 0 SEA SUB=L10 SSS SAM L15

L17 0 SEA SUB=L10 SSS FUL L15

L18 724 SEA SUB=L10 SSS FUL L7

FILE 'HCAPLUS' ENTERED AT 10:34:37 ON 27 FEB 2006

L19 349 SEA ABB=ON PLU=ON L18

L20 231 SEA ABB=ON PLU=ON L19(L) PREP/RL

L21 132 SEA ABB=ON PLU=ON L20 AND (UV? OR ULTRAVIOLET? OR
ULTRA(A) VIOLET?) (2A) ABSOR?

L22 0 SEA ABB=ON PLU=ON L21 AND BLOOM?

L23 62 SEA ABB=ON PLU=ON L21 AND COMPOSITION?

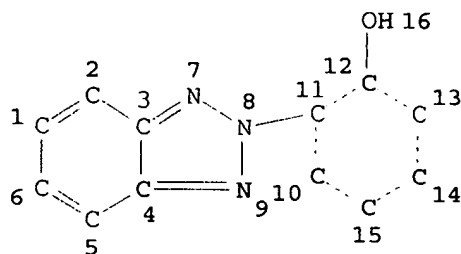
L24 62 SEA ABB=ON PLU=ON L23 AND P/DT
 L25 45 SEA ABB=ON PLU=ON L24 AND (1907-2000)/PRY,AY

 FILE 'REGISTRY' ENTERED AT 11:01:31 ON 27 FEB 2006
 L26 180 SEA ABB=ON PLU=ON L18 AND 1/NC

 FILE 'HCAPLUS' ENTERED AT 11:03:39 ON 27 FEB 2006
 L27 154 SEA ABB=ON PLU=ON L26
 L28 60 SEA ABB=ON PLU=ON L27 AND COMPOSITION?
 L29 35 SEA ABB=ON PLU=ON L28 AND (PLASTIC? OR POLYMER?)/SC,S
 X
 L30 17 SEA ABB=ON PLU=ON L29 NOT L25
 L31 16 SEA ABB=ON PLU=ON L30 AND P/DT
 L32 10 SEA ABB=ON PLU=ON L31 AND (1907-2000)/PRY,AY
 L33 1 SEA ABB=ON PLU=ON L30 NOT L31
 L34 1 SEA ABB=ON PLU=ON L33 NOT (2001-2005)/PY
 L35 56 SEA ABB=ON PLU=ON L25 OR L32 OR L34
 SEL L35 HIT RN 1-56
 L36 1 SEA ABB=ON PLU=ON L19 AND BLOOM?
 L37 0 SEA ABB=ON PLU=ON L27 AND BLOOM?
 L38 57 SEA ABB=ON PLU=ON L35 OR L36 OR L37

=> d que 117

L8 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

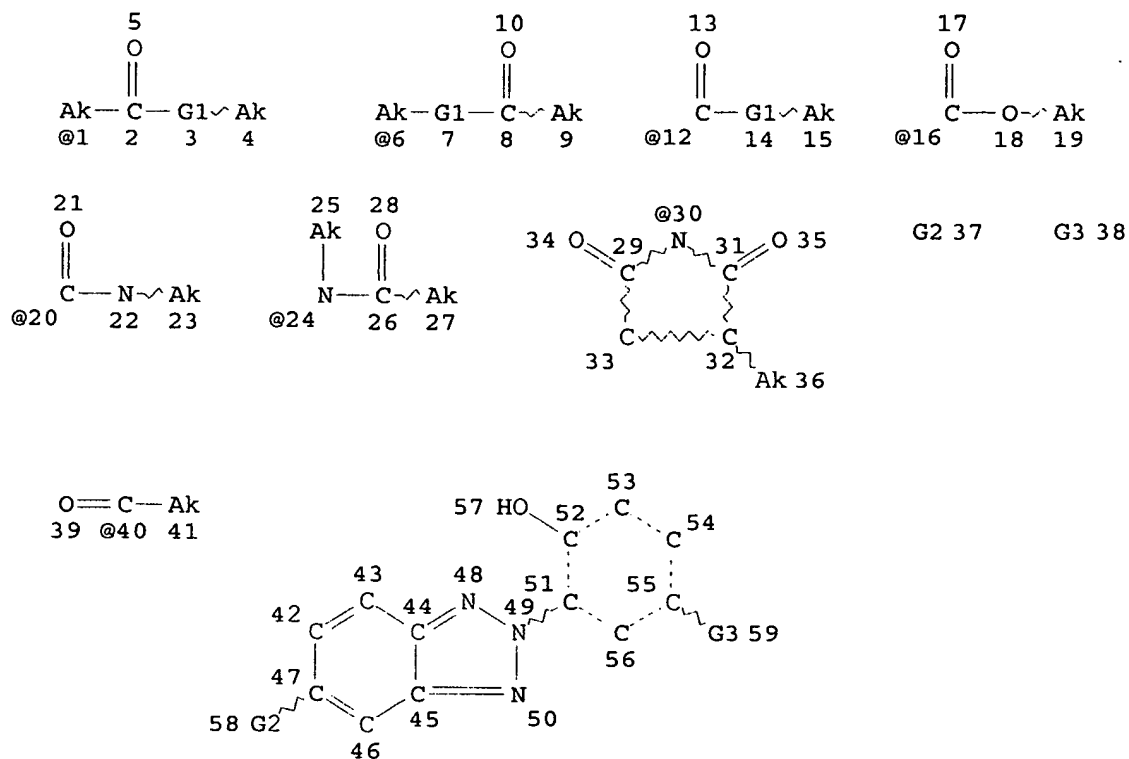
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

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L15 STR



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VAR G2=1/6/12

VAR G3=16/20/24/30/40

NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

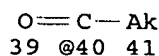
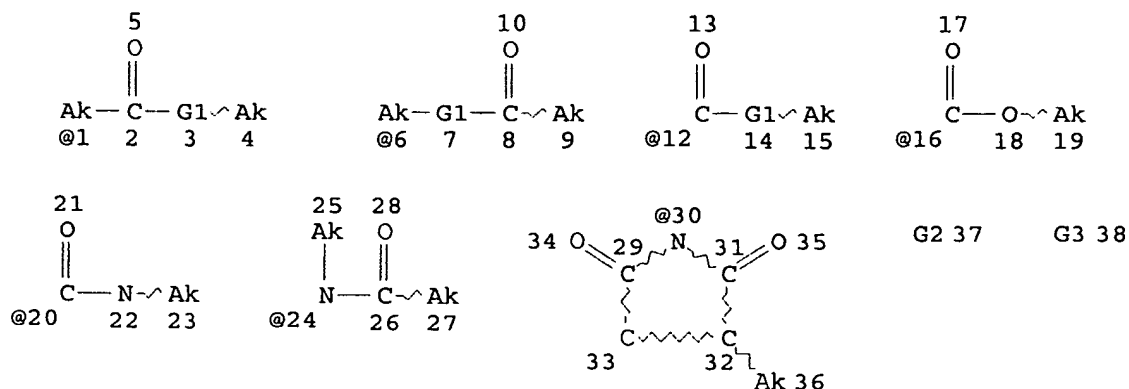
NUMBER OF NODES IS 58

STEREO ATTRIBUTES: NONE

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=> d que 138

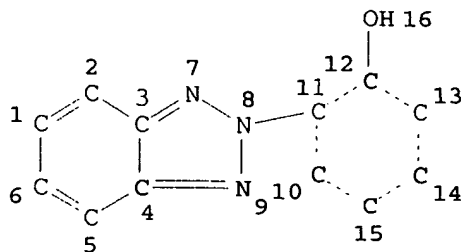
L7 STR



VAR G1=O/N
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VAR G3=16/20/24/30/40
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 40

STEREO ATTRIBUTES: NONE
L8 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
L10 6056 SEA FILE=REGISTRY SSS FUL L8
L18 724 SEA FILE=REGISTRY SUB=L10 SSS FUL L7
L19 349 SEA FILE=HCAPLUS ABB=ON PLU=ON L18
L20 231 SEA FILE=HCAPLUS ABB=ON PLU=ON L19(L) PREP/RL
L21 132 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND (UV? OR

ULTRAVIOLET? OR ULTRA(A)VIOLET?) (2A) ABSOR?

L23 62 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 AND COMPOSITION?

L24 62 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 AND P/DT

L25 45 SEA FILE=HCAPLUS ABB=ON PLU=ON L24 AND (1907-2000)/PR
Y,AY

L26 180 SEA FILE=REGISTRY ABB=ON PLU=ON L18 AND 1/NC

L27 154 SEA FILE=HCAPLUS ABB=ON PLU=ON L26

L28 60 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND COMPOSITION?

L29 35 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND (PLASTIC? OR
POLYMER?)/SC, SX

L30 17 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 NOT L25

L31 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L30 AND P/DT

L32 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L31 AND (1907-2000)/PR
Y,AY

L33 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L30 NOT L31

L34 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L33 NOT (2001-2005)/PY

L35 56 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 OR L32 OR L34

L36 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND BLOOM?

L37 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND BLOOM?

L38 57 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 OR L36 OR L37

=> => fil hcap

FILE 'HCAPLUS' ENTERED AT 11:32:55 ON 27 FEB 2006

=> d l38 1-57 ibib abs hitstr hitind

L38 ANSWER 1 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:538320 HCAPLUS

DOCUMENT NUMBER: 137:95279

TITLE: Acrylic polymer-based one-component coatings
with long pot life and good weather resistance
after curing

INVENTOR(S): Noda, Nobuhisa; Nishida, Toshifumi; Aoyama,
Takahiro

PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002201407	A2	20020719	JP 2000-403100	2000 1228

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PRIORITY APPLN. INFO.: JP 2000-403100

2000

1228

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AB The coatings, useful for packaging materials, construction materials, etc., comprise copolymers of reactive-silyl-bearing monomers 3-90, acidic group-bearing monomers 0.3-4, UV-absorbing monomers 1-80, and comonomers 0-95% and alc.-OH-bearing organic solvents. The acidic group-bearing monomers

may contain carboxyl, sulfo, and/or phosphoric acid groups. Thus, 0.3:90:9.7 (%) methacrylic acid-KBM 503 (3-methacryloxypropyltrimethoxysilane)-2-[2'-hydroxy-5'-(methacryloyloxyethyl)phenyl]-2H-benzotriazole copolymer/diacetone alc. composition showed gelation time ≥ 4 h and formed a cured coating layer showing good scratch and water resistance and no peeling from a polymer support in an accelerated weathering test.

IT 442518-95-8P

(UV absorber-copolymer. one-pot acrylic coatings with good water, weather, and soiling resistance)

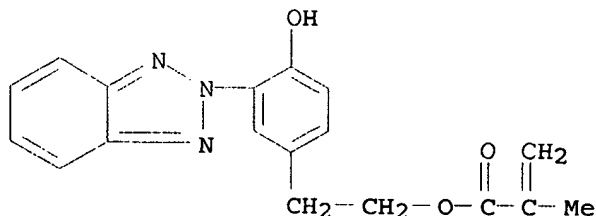
RN 442518-95-8 HCAPLUS

CN Butanedioic acid, 6-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]-6-oxohexyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

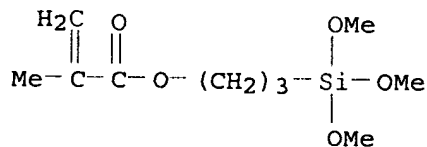
CMF C18 H17 N3 O3



CM 2

CRN 2530-85-0

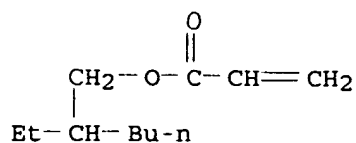
CMF C10 H20 O5 Si



CM 3

CRN 103-11-7

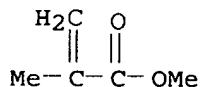
CMF C11 H20 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



CM 5

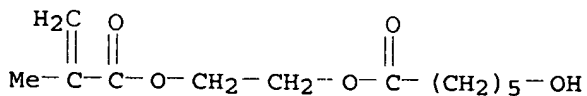
CRN 121338-00-9

CMF C12 H20 O5 . x C4 H6 O4

CM 6

CRN 85099-10-1

CMF C12 H20 O5



CM 7

CRN 110-15-6

CMF C4 H6 O4



IC ICM C09D143-04

ICS C09D133-06; C09D141-00; C09D143-02; C09D157-00; C09D157-10;
C09D183-04

CC 42-7 (Coatings, Inks, and Related Products)

ST acrylic silsesquioxane coating lightproof weather resistance;
methacryloxypropylmethoxysilane hydroxymethacryloyloxyethylphenylb
enzotriazole methacrylic coating waterproof antisoiling;
UV absorber copolymerized acrylic coating alc
thinned

IT Coating materials

(acid- and scratch-resistant, waterproof, transparent,
antisoiling, weather-resistant; **UV absorber**
-copolymerized. one-pot acrylic coatings with good water, weather,

- and soiling resistance)
- IT Silsesquioxanes
(acrylic; **UV absorber**-copolymd. one-pot
acrylic coatings with good water, weather, and soiling
resistance)
- IT Coating materials
(antisoiling, weather-resistant, waterproof, transparent, acid-
and scratch-resistant; **UV absorber**
-copolymd. one-pot acrylic coatings with good water, weather,
and soiling resistance)
- IT Coating materials
(one-component, curable; **UV absorber**
-copolymd. one-pot acrylic coatings with good water, weather,
and soiling resistance)
- IT Coating materials
(storage-stable; **UV absorber**-copolymd.
one-pot acrylic coatings with good water, weather, and soiling
resistance)
- IT Coating materials
(water- and weather-resistant, antisoiling, transparent, acid-
and scratch-resistant; **UV absorber**
-copolymd. one-pot acrylic coatings with good water, weather,
and soiling resistance)
- IT 121338-00-9P, Placel FM 1A 403737-10-0P 442143-28-4P,
2-[2'-Hydroxy-5'-(methacryloyloxyethyl)phenyl]-2H-benzotriazole-
KBM 503-methacrylic acid copolymer 442143-29-5P 442143-30-8P
442143-31-9P 442143-32-0P 442143-33-1P **442518-95-8P**
(**UV absorber**-copolymd. one-pot acrylic
coatings with good water, weather, and soiling resistance)
- IT 123-42-2, Diacetone alcohol
(solvents; **UV absorber**-copolymd. one-pot
acrylic coatings with good water, weather, and soiling
resistance)

L38 ANSWER 2 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:497247 HCAPLUS
DOCUMENT NUMBER: 137:70526
TITLE: Resin **composition** containing
ultraviolet absorbing resin for ink jet
recording and recorded material
INVENTOR(S): Sumida, Katsuhiko; Ikami, Kiyotaka
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002187344	A2	20020702	JP 2000-385797	2000 1219
PRIORITY APPLN. INFO.:				<--
				JP 2000-385797
				2000 1219
				<--

AB The resin **composition** for ink receiving layer comprises at least (a) 97-40 weight% inorg. particles, (b) 3-60 weight% binder resin containing a **UV absorbing** resin. The **UV absorbing** resin is emulsified by dispersing into water after neutralizing a resin solution obtained by urethane-reacting a polyester-polyol with **UV absorbing** group, a polyol compound, and an ionic group-containing compound with an organic polyisocyanate in an organic solvent. It forms the ink receiving layer with improved gloss, ink absorbency, and light stability.

IT **413571-09-2P 439808-34-1P**, Dimethylolbutanoic acid-isophorone diisocyanate-polycaprolactone MBEP ester copolymer 2-dimethylaminoethanol salt **439808-37-4P**, Isophorone diisocyanate-polycaprolactone MBEP ester copolymer N-methyldiethanolamine salt
(ink-jet printing sheet containing inorg. particle and resin with **UV absorbing** group)

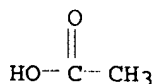
RN 413571-09-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]], graft, acetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 64-19-7

CMF C2 H4 O2



CM 2

CRN 413571-08-1

CMF (C12 H18 N2 O2 . C8 H15 N O2 . (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4)x

CCI PMS

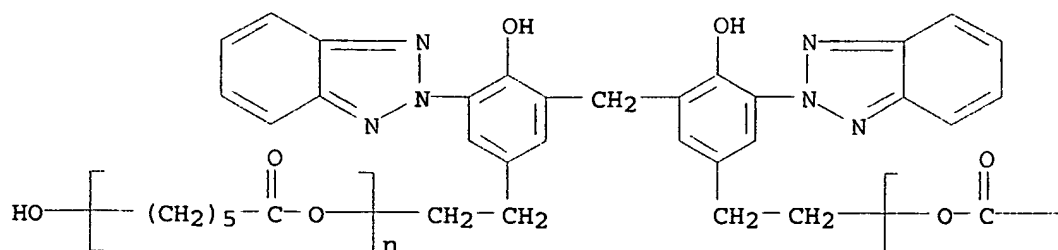
CM 3

CRN 214746-68-6

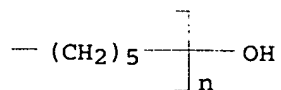
CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-A



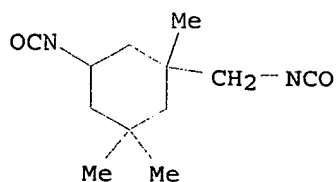
PAGE 1-B



CM 4

CRN 4098-71-9

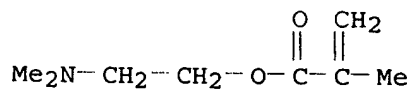
CMF C12 H18 N2 O2



CM 5

CRN 2867-47-2

CMF C8 H15 N O2



RN 439808-34-1 HCAPLUS

CN Butanoic acid, bis(hydroxymethyl)-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-

3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]], compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0

CMF C4 H11 N O

Me₂N-CH₂-CH₂-OH

CM 2

CRN 439808-33-0

CMF (C12 H18 N2 O2 . C6 H12 O4 . (C6 H10 O2)_n (C6 H10 O2)_n C29 H26 N6 O4)_x

CCI PMS

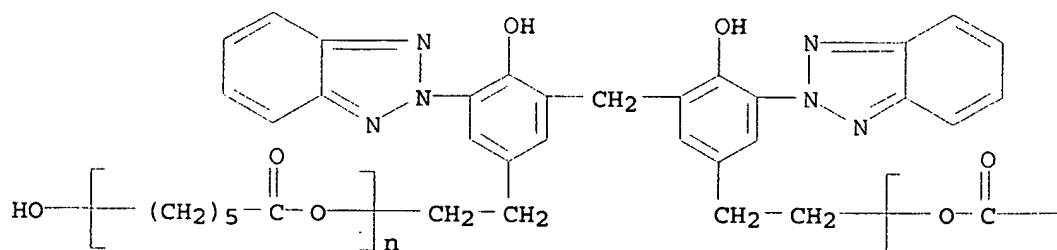
CM 3

CRN 214746-68-6

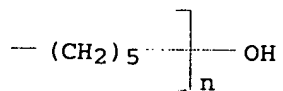
CMF (C6 H10 O2)_n (C6 H10 O2)_n C29 H26 N6 O4

CCI PMS

PAGE 1-A



PAGE 1-B

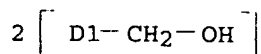
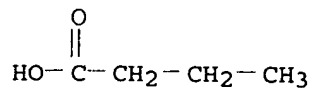


CM 4

CRN 56743-27-2

CMF C6 H12 O4

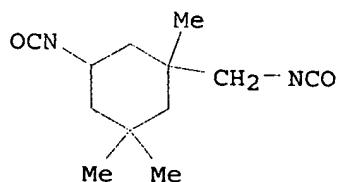
CCI IDS



CM 5

CRN 4098-71-9

CMF C12 H18 N2 O2



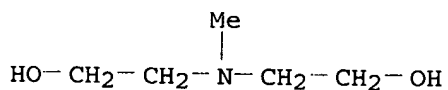
RN 439808-37-4 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxy-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, compd. with 2,2'-(methylimino)bis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 105-59-9

CMF C5 H13 N O2



CM 2

CRN 439808-36-3

CMF (C12 H18 N2 O2) . (C6 H10 O2)_n (C6 H10 O2)_n C29 H26 N6 O4)_x

CCI PMS

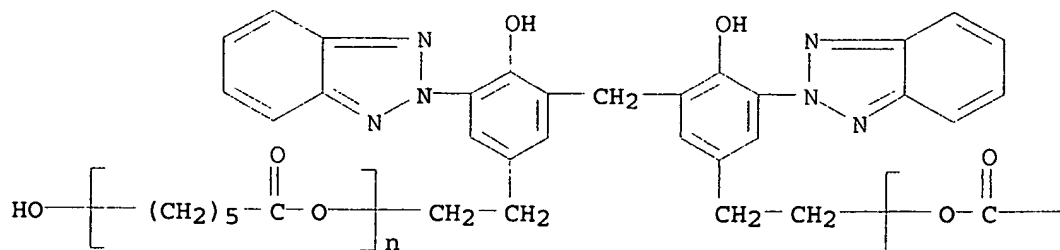
CM 3

CRN 214746-68-6

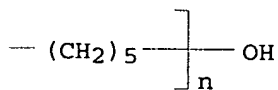
CMF (C6 H10 O2)_n (C6 H10 O2)_n C29 H26 N6 O4

CCI PMS

PAGE 1-A



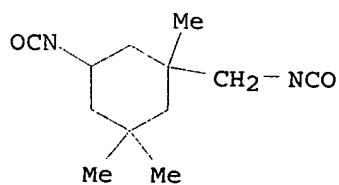
PAGE 1-B



CM 4

CRN 4098-71-9

CMF C12 H18 N2 O2



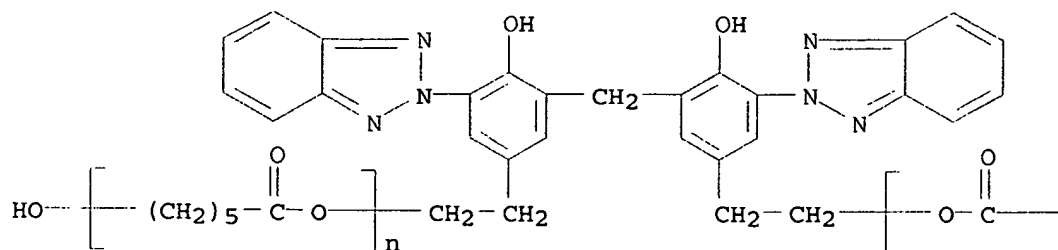
IT 214746-68-6P

(preparation and polymerization with diisocyanate)

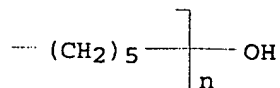
RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



- IC ICM B41M005-00
ICS B41J002-01; C08G018-42; C08G018-66; C08K003-00; C08L075-06;
C08L101-10; C09D005-02; C09D005-32; C09D175-04
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)
Section cross-reference(s): 38
- ST ink jet printing sheet **UV absorbing** resin;
inorg particle ink jet printing sheet; polyurethane polyester
UV absorbing resin
- IT Polyurethanes, preparation
(acrylic-polyester-, graft; ink-jet printing sheet containing
inorg. particle and resin with **UV absorbing**
group)
- IT Polyesters, preparation
(acrylic-polyurethane-, graft; ink-jet printing sheet containing
inorg. particle and resin with **UV absorbing**
group)
- IT Ink-jet recording sheets
(ink-jet printing sheet containing inorg. particle and resin with
UV absorbing group)
- IT Polyurethanes, preparation
(polyester-, block; ink-jet printing sheet containing inorg.
particle and resin with **UV absorbing** group)
- IT 7631-86-9, Silica, uses
(colloidal, ST 20; ink-jet printing sheet containing inorg.
particle and resin with **UV absorbing** group)
- IT 275373-90-5P, Butyl acrylate-2-diethylaminoethyl
methacrylate-3-methacryloxypropyl trimethoxysilane copolymer
413571-09-2P 439808-34-1P, Dimethylolbutanoic
acid-isophorone diisocyanate-polycaprolactone MBEP ester copolymer
2-dimethylaminoethanol salt **439808-37-4P**, Isophorone
diisocyanate-polycaprolactone MBEP ester copolymer

N-methyldiethanolamine salt

(ink-jet printing sheet containing inorg. particle and resin with
UV absorbing group)

IT 65339-94-8, Neorez R 960 413614-44-5, F 8559D

(ink-jet printing sheet containing inorg. particle and resin with
UV absorbing group)

IT 214746-68-6P 215232-60-3P

(preparation and polymerization with diisocyanate)

L38 ANSWER 3 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:464236 HCAPLUS

DOCUMENT NUMBER: 137:34029

TITLE: Light-resistant polycarbonate
compositions containing UV
absorbers with good compatibility and
their shaped articles

INVENTOR(S): Yamamoto, Ryuichi; Sugimori, Seiji

PATENT ASSIGNEE(S): Ipposha Oil Industries Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002173590	A2	20020621	JP 2000-370099	2000 1205

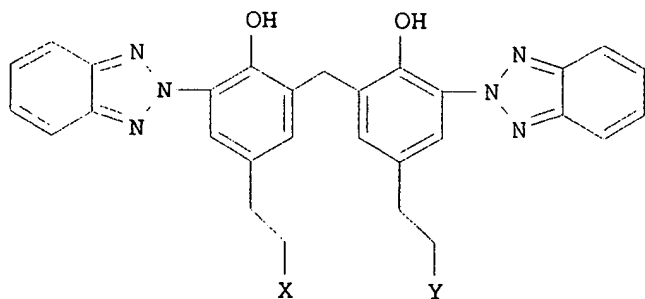
PRIORITY APPLN. INFO.:

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JP 2000-370099
2000
1205

OTHER SOURCE(S):
GI

MARPAT 137:34029

<--



I

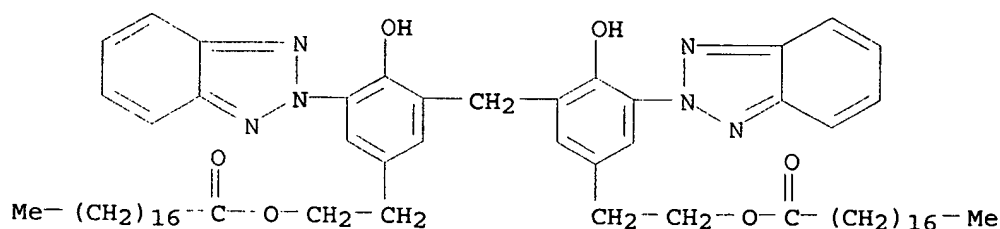
AB The **comps.** contain polycarbonates and 2,2-methylenebis(6-benzotriazolephenols) I (X, Y = OCOR₁, ONHCOR₂, OH; X = Y ≠ OH; R₁, R₂ = C₆-26 alkyl, C₆-26 alkenyl). Thus, 0.5 mol 2,2'-methylenebis(4-hydroxyethyl-6-benzotriazolephenol) (MBHB) was esterified with 1.2 mol stearic acid in PhMe in the presence of Na p-toluenesulfonate to give MBHB stearate ester in

93% yield. Iupilon E 2000F (polycarbonate) (100 parts) was pelletized with 3 parts MBHB stearate ester and injection-molded to give test pieces showing haze 1.1, b value after 4000-h irradiation in a Xe fadeometer of 1.9, and transmittance (330 nm) after 2-wk storage at 60° of 0.5.

IT 288570-56-9P, 2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) distearate 288570-57-0P, 2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) dilaurate 288570-58-1P, 2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) dibehenate 288570-59-2P, 2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) dioleate (light-resistant polycarbonate compns. containing benzotriazole-based UV absorbers with good compatibility)

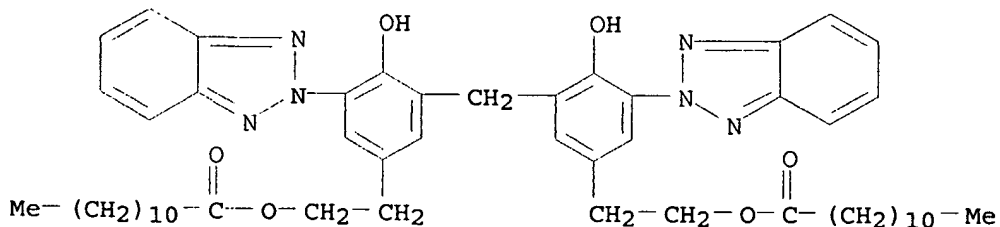
RN 288570-56-9 HCAPLUS

CN Octadecanoic acid, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)



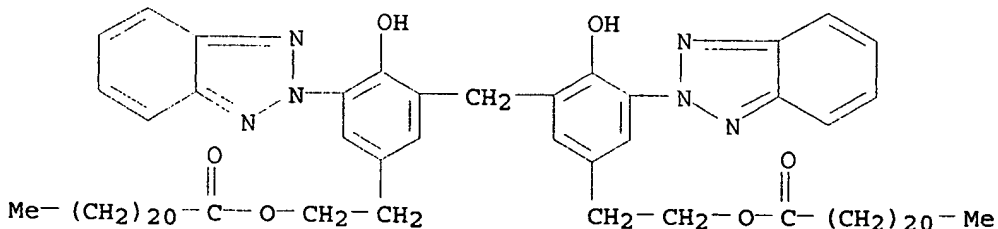
RN 288570-57-0 HCAPLUS

CN Dodecanoic acid, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)



RN 288570-58-1 HCAPLUS

CN Docosanoic acid, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

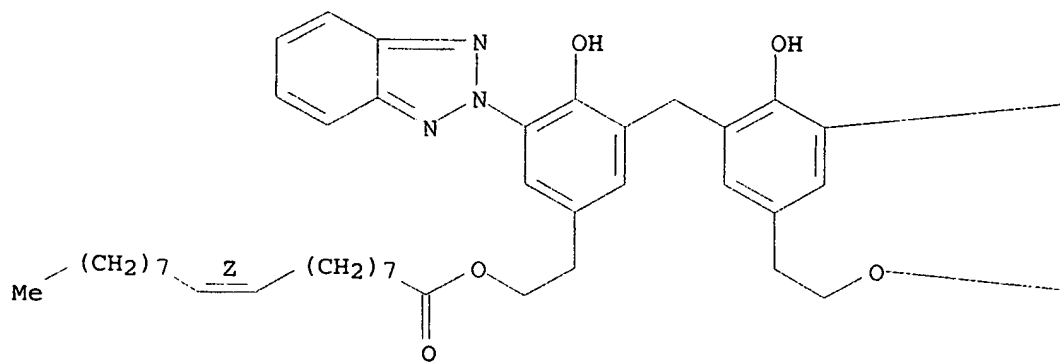


RN 288570-59-2 HCAPLUS

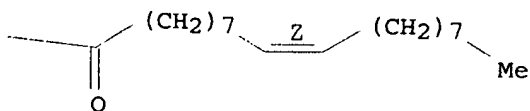
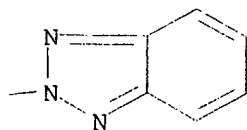
CN 9-Octadecenoic acid (9Z)-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



- IC ICM C08L069-00
ICS C08J005-00; C08K005-3475
- CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 28, 38
- ST light resistance polycarbonate **UV absorber**
methylenebisbenzotriazolephenol; benzotriazolephenol methylenebis
stearate **UV absorber** polycarbonate
- IT Light-resistant materials
UV stabilizers
(light-resistant polycarbonate **compns.** containing
benzotriazole-based **UV absorbers** with good
compatibility)
- IT Polycarbonates, uses
(light-resistant polycarbonate **compns.** containing
benzotriazole-based **UV absorbers** with good
compatibility)
- IT 112-96-9DP, Octadecyl isocyanate, reaction products with

2,2-methylenebis(4-hydroxyethyl-6-benzotriazolephenol)
288570-56-9P, 2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) distearate **288570-57-0P**,
 2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) dilaurate **288570-58-1P**, 2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) dibehenate **288570-59-2P**,
 2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) dioleate **288570-60-5P**

(light-resistant polycarbonate **compns.** containing benzotriazole-based **UV absorbers** with good compatibility)

IT 24936-68-3, Iupilon E 2000F, uses 25037-45-0
 (light-resistant polycarbonate **compns.** containing benzotriazole-based **UV absorbers** with good compatibility)

IT 57-11-4, Stearic acid, reactions 112-80-1, Oleic acid, reactions 112-85-6, Behenic acid 143-07-7, Lauric acid, reactions 196516-61-7, 2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol)
 (reactant; light-resistant polycarbonate **compns.** containing benzotriazole-based **UV absorbers** with good compatibility)

L38 ANSWER 4 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:315011 HCAPLUS

DOCUMENT NUMBER: 136:326372

TITLE: Ultraviolet-absorbing polyester-polyurethane resins for aqueous emulsion coatings and aqueous polyester-polyurethane emulsions for artificial leather preparation

INVENTOR(S): Inokami, Kiyotaka; Endo, Toshio; Fujii, Tatsumi

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002032981	A1	20020425	WO 2001-JP9099	2001 1017
<--				
W: CN, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
JP 2002121253	A2	20020423	JP 2000-317216	2000 1017
<--				
JP 2002145979	A2	20020522	JP 2000-346500	2000 1114
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JP 2002145976	A2	20020522	JP 2000-346501	2000

1114

JP 2003012748 A2 20030115 JP 2001-196432

2001
0628

EP 1334988 A1 20030813 EP 2001-978815

2001
1017

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, FI, CY, TR

JP 2002226541 A2 20020814 JP 2001-348005

2001
1113

US 2003144455 A1 20030731 US 2002-172402

2002
0614

PRIORITY APPLN. INFO.:

JP 2000-317216 A

2000
1017

JP 2000-346496 A

2000
1114

JP 2000-346500 A

2000
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JP 2000-346501 A

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1114

JP 2001-196432 A

2001
0628

WO 2001-JP9099 W

2001
1017

AB An aqueous emulsion of an **UV-absorbing** resin prepared by reacting a polyester polyol (A) having **UV-absorbing** groups with a compound (C) bearing an ionic and/or nonionic surface active group, an organic polyisocyanate (D), and, if necessary, a polyol (B) optionally in an organic solvent (s) to obtain an **UV-absorbing** resin (i) and neutralizing a solution of the resin (i) with a neutralizing agent (E) is excellent in compatibility, light resistance, bleedout resistance, alkali resistance and solvent resistance and useful in the coating of artificial leather, plastics, woody materials and so on. Artificial leather made from an aqueous polyurethane emulsion constituted of a polyester diol (VIIIA) comprising one diol selected from among 2-n-butyl-2-ethyl-1,3-propanediol, 2,2-diethyl-1,3-propanediol and 2,4-diethyl-1,5-pentanediol, e-caprolactone, and adipic acid as constituent units, a chain-lengthening agent (VIIIB), a compound (C) bearing an ionic and/or nonionic surface active group, an organic polyisocyanate (D), and a neutralizing agent (E) is excellent in softness, light

resistance, resistance to hydrolysis, and heat resistance. Thus, 1,1-bis[3-(2H-benzotriazol-2-yl)-4-hydroxybenzeneethanol]methane (MBEP) initiated-polycaprolactone was reacted with IPDI and dimethylolbutanoic acid, and neutralized with dimethylaminoethanol to give an aqueous emulsion, 3 parts of which was mixed with 100 parts aqueous polyurethane emulsion (NeoRez R 960), and cast on a Teflon-coated glass plate to give a film showing good light resistance.

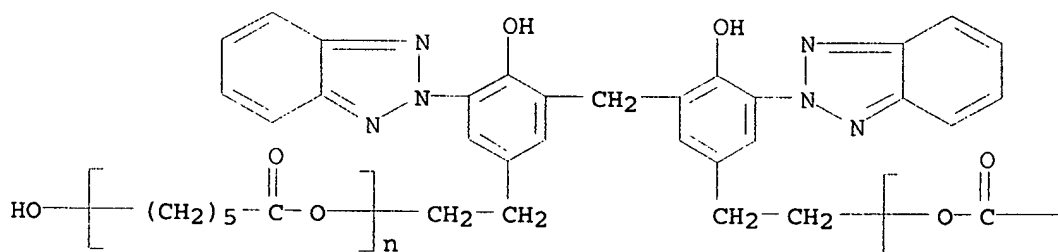
IT 214746-68-6P

(intermediate; preparation of UV-absorbing aqueous polyester-polyurethane resin emulsion compns. for coatings)

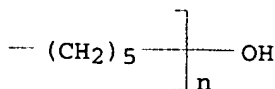
RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxy- (9CI) (CA INDEX NAME)

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PAGE 1-B



IT 410074-08-7P 413571-06-9P 413571-09-2P
413571-11-6P

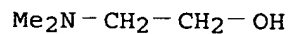
(preparation of UV-absorbing aqueous polyester-polyurethane resin emulsion compns. for coatings)

RN 410074-08-7 HCAPLUS

CN Butanoic acid, bis(hydroxymethyl)-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]], block, compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0
CMF C4 H11 N O



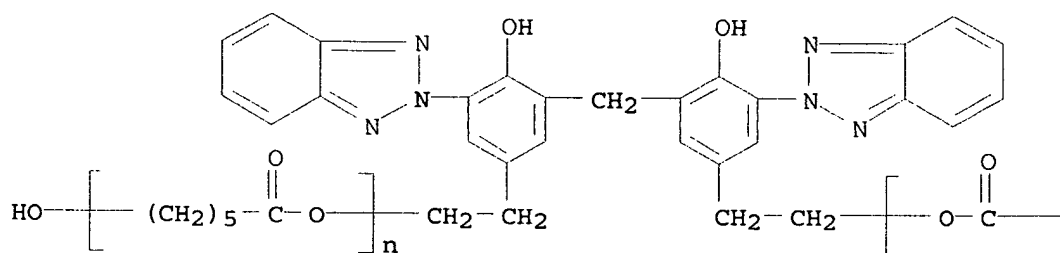
CM 2

CRN 410074-07-6
CMF (C12 H18 N2 O2 . C6 H12 O4 . (C6 H10 O2)n (C6 H10 O2)n C29
H26 N6 O4)x
CCI PMS

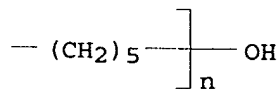
CM 3

CRN 214746-68-6
CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4
CCI PMS

PAGE 1-A

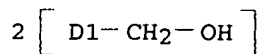
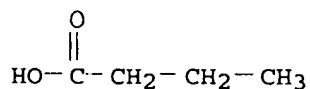


PAGE 1-B



CM 4

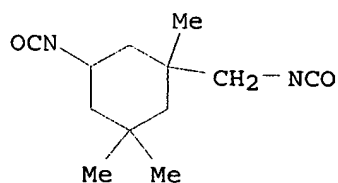
CRN 56743-27-2
CMF C6 H12 O4
CCI IDS



CM 5

CRN 4098-71-9

CMF C12 H18 N2 O2



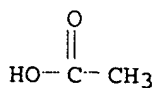
RN 413571-06-9 HCAPLUS

CN Ethanol, 2,2'-(methylimino)bis-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]], block, acetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 64-19-7

CMF C2 H4 O2



CM 2

CRN 413571-05-8

CMF (C12 H18 N2 O2 . (C6 H10 O2)_n (C6 H10 O2)_n C29 H26 N6 O4 . C5 H13 N O2)_x

CCI PMS

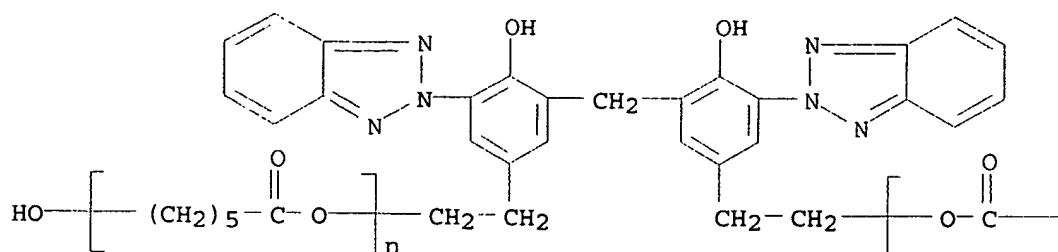
CM 3

CRN 214746-68-6

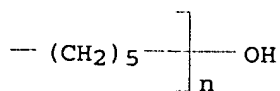
CMF (C6 H10 O2)_n (C6 H10 O2)_n C29 H26 N6 O4

CCI PMS

PAGE 1-A



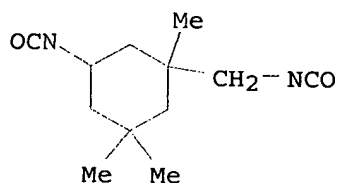
PAGE 1-B



CM 4

CRN 4098-71-9

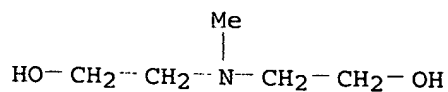
CMF C12 H18 N2 O2



CM 5

CRN 105-59-9

CMF C5 H13 N O2



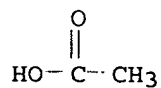
RN 413571-09-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and α, α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -

hydroxypoly[oxy(1-oxo-1,6-hexanediyl)], graft, acetate (salt)
(9CI) (CA INDEX NAME)

CM 1

CRN 64-19-7
CMF C2 H4 O2



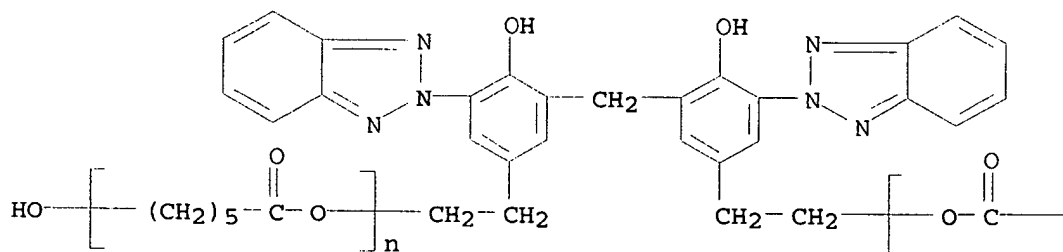
CM 2

CRN 413571-08-1
CMF (C12 H18 N2 O2 . C8 H15 N O2 . (C6 H10 O2)n (C6 H10 O2)n C29
H26 N6 O4)x
CCI PMS

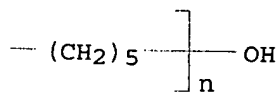
CM 3

CRN 214746-68-6
CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4
CCI PMS

PAGE 1-A



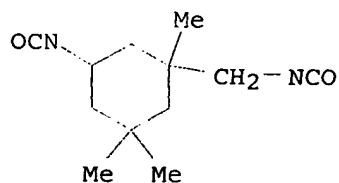
PAGE 1-B



CM 4

CRN 4098-71-9

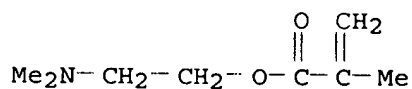
CMF C12 H18 N2 O2



CM 5

CRN 2867-47-2

CMF C8 H15 N O2



RN 413571-11-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-methoxyethoxy)ethyl ester, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]], graft (9CI) (CA INDEX NAME)

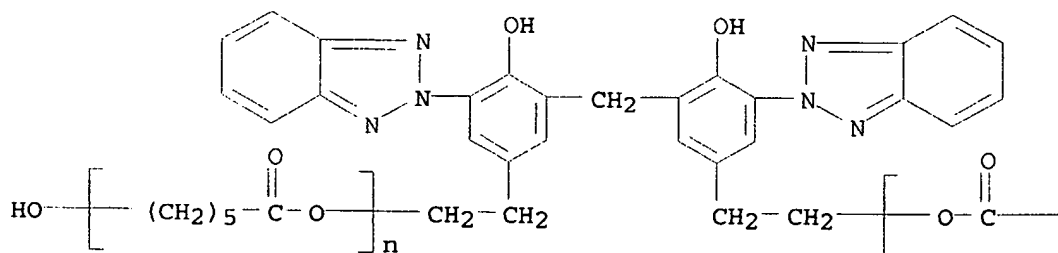
CM 1

CRN 214746-68-6

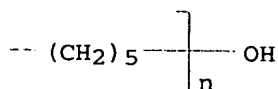
CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-A



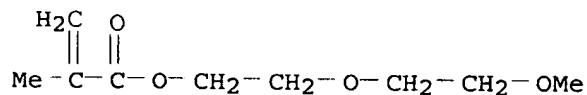
PAGE 1-B



CM 2

CRN 45103-58-0

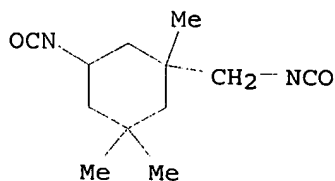
CMF C9 H16 O4



CM 3

CRN 4098-71-9

CMF C12 H18 N2 O2



- IC ICM C08G018-48
ICS C08L075-06; D06N003-18; C09D175-06
- CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 40, 42, 43
- ST **UV absorbing** polyester polyurethane aq emulsion **compn** prepn; coating **UV absorbing** resin artificial leather plastic wood; artificial leather prepn polyester polyurethane aq emulsion
- IT Polyurethanes, preparation
(acrylic-polyester-, graft; preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT Polyesters, preparation
(acrylic-polyurethane-, graft; preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT Polyesters, preparation
(intermediate; preparation of **UV-absorbing** aqueous

- polyester-polyurethane resin emulsion **compns.** for coatings)
- IT Polyurethanes, preparation
(polyester-, block; preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT Polyurethanes, preparation
(polyester-polyurea-, block; preparation of aqueous polyester-polyurethane resin emulsion **compns.** for preparation of artificial leathers)
- IT Polyureas
(polyester-polyurethane-, block; preparation of aqueous polyester-polyurethane resin emulsion **compns.** for preparation of artificial leathers)
- IT Polyurethanes, uses
(polyether-; preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT Polyurethanes, uses
(polyoxyalkylene-; preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT Polyesters, preparation
(polyurea-polyurethane-, block; preparation of aqueous polyester-polyurethane resin emulsion **compns.** for preparation of artificial leathers)
- IT Leather substitutes
(preparation of (**UV-absorbing**) aqueous polyester-polyurethane resin emulsion **compns.** for coatings or preparation of artificial leathers)
- IT UV stabilizers
(preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT Macromonomers
(preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT Acrylic polymers, uses
(preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT Polyurethanes, uses
(preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT Wood
(preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings of)
- IT Coating materials
(weather-resistant; preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT 214746-68-6P 215232-60-3P
(intermediate; preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)
- IT 413571-07-0P 413571-10-5P
(macromer; preparation of **UV-absorbing** aqueous

polyester-polyurethane resin emulsion **compns.** for coatings)

IT 410074-08-7P 413571-06-9P 413571-09-2P
413571-11-6P
(preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)

IT 100-42-5D, Styrene, polymers with acrylic compds. 9003-53-6, Polystyrene 65339-94-8, NeoRez R 960 116788-79-5, Rhoplex WL 96 120478-69-5, Superflex E 2000 194554-30-8, NeoCryl A 6092 223419-36-1, Evafanol AP 12 413614-44-5, F 8559D 413614-53-6, NeoCryl A 1091 413614-55-8, Solucote 25-191
(preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns.** for coatings)

IT 413571-13-8P 413571-15-0P 413571-17-2P 413571-19-4P
413571-21-8P 413571-23-0P 413571-25-2P
(preparation of aqueous polyester-polyurethane resin emulsion **compns.** for preparation of artificial leathers)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 5 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:301774 HCAPLUS
DOCUMENT NUMBER: 136:311351
TITLE: Aromatic polyester articles having transparent abrasion- and weather-resistant hard coating layer
INVENTOR(S): Shibuya, Takashi; Ishiseki, Kenji; Sanegiri, Yukio; Yamamoto, Hiroshi
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002121307	A2	20020423	JP 2000-315560	2000 1016

PRIORITY APPLN. INFO.: <-- JP 2000-315560 2000
1016

AB The aromatic polyester articles have an adherent layer and a hard coating layer formed by curing of **compns.** containing compds. having ≥ 2 polymerizable functional groups, (meth)acryloyl group-containing benzophenones and/or benzotriazoles as **UV absorbers**, and photopolymn. initiators. Thus, a **composition** containing a urethane acrylate (prepared from OH-containing dipentaerythritol polyacrylate and hexamethylene diisocyanate partial isocyanurate compound), Aronix M 325 [caprolactone-modified tris(acryloyloxyethyl) isocyanurate], 2-[2-hydroxy-5-(2-acryloyloxyethyl)phenyl]benzotriazole, bis(1,2,2,6,6-pentamethyl-4-

piperidyl) sebacate, and 2-methyl-1-[4-(methylthio)phenyl]-2-morpholinopropan-1-one was applied on T 600E100W42 (PET film having adherent layer) and UV-cured to give a hard coating layer showing good adhesion to the PET film, good transparency, and no discoloration after 1000 h in a sunshine weatherometer.

IT 411208-76-9P, Dipentaerythritol acrylate-hexamethylene diisocyanate-hexamethylene diisocyanate isocyanurate-2-[2'-hydroxy-5-(2-acryloyloxyethyl)phenyl]benzotriazole-Aronix M 325 copolymer (aromatic polyester articles having transparent abrasion- and weather-resistant hard coating layer)

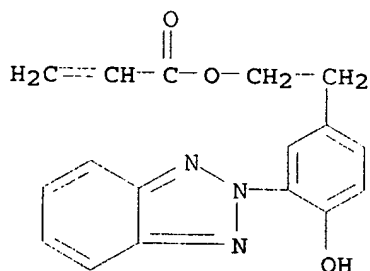
RN 411208-76-9 HCAPLUS

CN Hexanoic acid, 6-[(1-oxo-2-propenyl)oxy]-, 2-[tetrahydro-2,4,6-trioxo-3,5-bis[2-[(1-oxo-2-propenyl)oxy]ethyl]-1,3,5-triazin-1(2H)-yl]ethyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, 1,6-diisocyanatohexane, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-1,3-propanediol] 2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2

CMF C17 H15 N3 O3

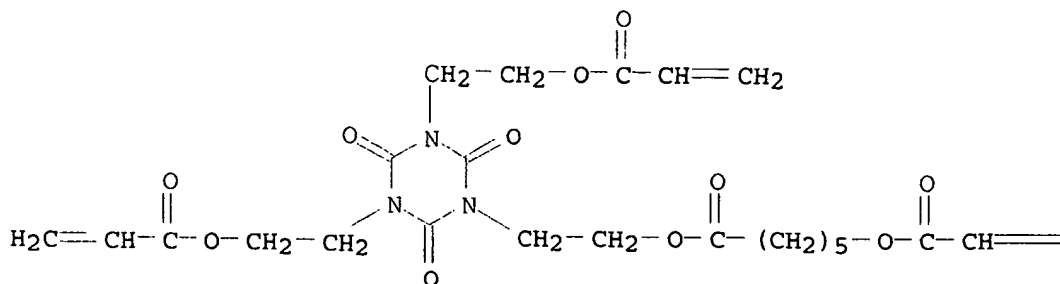


CM 2

CRN 106556-00-7

CMF C24 H31 N3 O11

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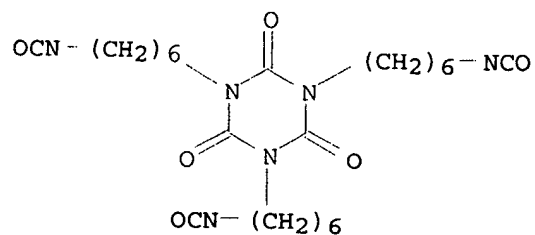
PAGE 1-B



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CRN 3779-63-3

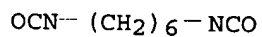
CMF C24 H36 N6 O6



CM 4

CRN 822-06-0

CMF C8 H12 N2 O2



CM 5

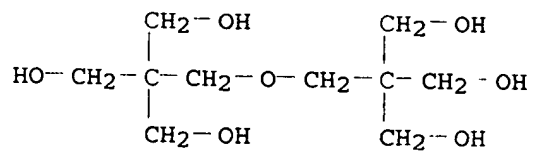
CRN 77641-99-7

CMF C10 H22 O7 . x C3 H4 O2

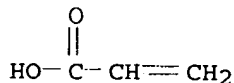
CM 6

CRN 126-58-9

CMF C10 H22 O7



CM 7

CRN 79-10-7
CMF C3 H4 O2

IC ICM C08J007-04
ICS B32B027-18; B32B027-36; C08F002-50; C08F220-10; C09D004-00;
C09D005-00; C08L067-02
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 38
ST polyester film coating benzophenone **UV absorber**
; benzotriazole **UV absorber** coating PET film;
transparency weather resistance coating acrylic polyurethane;
abrasion resistance coating polyurethane acrylate polyisocyanurate
IT **411208-76-9P**, Dipentaerythritol acrylate-hexamethylene
diisocyanate-hexamethylene diisocyanate isocyanurate-2-[2'-hydroxy-
5-(2-acryloyloxyethyl)phenyl]benzotriazole-Aronix M 325 copolymer
411208-77-0P, Aronix M 325-dipentaerythritol acrylate-
hexamethylene diisocyanate-hexamethylene diisocyanate
isocyanurate-2-hydroxy-4-(2-acryloyloxyethoxy)benzophenone
copolymer
(aromatic polyester articles having transparent abrasion- and
weather-resistant hard coating layer)

L38 ANSWER 6 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:847347 HCAPLUS
DOCUMENT NUMBER: 136:7733
TITLE: Soil- and weather-resistant aqueous coating
compositions
INVENTOR(S): Tanaka, Motomi; Fukuzumi, Tatsushi; Ito,
Takaaki
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2001323209	A2	20011122	JP 2000-139933	2000 0512

PRIORITY APPLN. INFO.: <--
JP 2000-139933
2000
0512

AB Title **compns.**, also having good storage stability and
water resistance, contain polymers prepared from CH₂:CR₁COOC(CH₃)₃
(R₁ = H, Me, or Et) 5-80, piperidyl-containing ethylenic unsatd.
compds. 0.1-10, **UV- absorbing** ethylenic

unsatd. compds. 0.1-10, ethylenic unsatd. acids 0.1-10, and other ethylenic unsatd. compds. 0-94.7%. An aqueous emulsion containing tert-Bu methacrylate-Bu methacrylate-2-ethylhexyl acrylate-methacrylic acid-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2-(2'-hydroxy-5'-acryloxyethylphenyl)-2H-benzotriazole-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2-hydroxy-4-(3-methacryloxy-2-hydroxypropoxy)benzophenone-2-hydroxy-4-(3-acryloxy-2-hydroxypropoxy) benzophenone copolymer with glass-transition temperature of -19° showed viscosity change of <5% after storing at 40° for 168 h and room temperature for 1 mo, good adhesion to steel plates and acrylic or fluoro resin coatings, and good soil, water, and weather resistance.

IT 374901-44-7P 374901-48-1P, Tert-Butyl acrylate-tert-butyl methacrylate-butyl methacrylate-cyclohexyl methacrylate-2-ethylhexyl acrylate-ethylene glycol methacrylate tetrahydrophthalate-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2,2,6,6-tetramethyl-4-piperidyl methacrylate-2-(2'-hydroxy-5'-acryloxyethylphenyl)benzotriazole-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole copolymer (piperidyl methacrylate- and UV absorbing (meth)acrylate-containing acrylic resin aqueous coatings with adhesion to steel plates and other coatings)

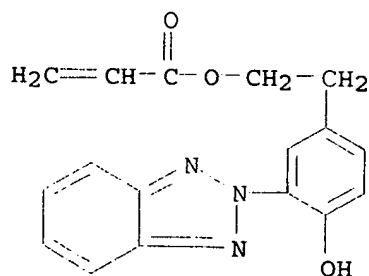
RN 374901-44-7 HCAPLUS

CN 4-Cyclohexene-1,2-dicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 2-ethylhexyl 2-propenoate, 2-methyl-2-propenoic acid, α-[1-[(nonylphenoxy)methyl]-2-(2-propenyloxy)ethyl]-ω-hydroxypoly(oxy-1,2-ethanediyl) and 1,2,2,6,6-pentamethyl-4-piperidiny 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2

CMF C17 H15 N3 O3

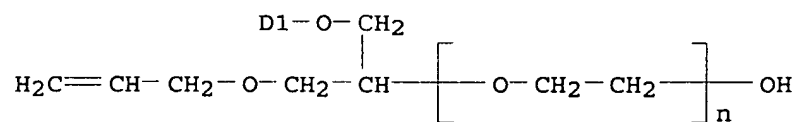
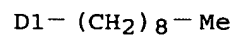


CM 2

CRN 111144-60-6

CMF (C2 H4 O)_n C21 H34 O3

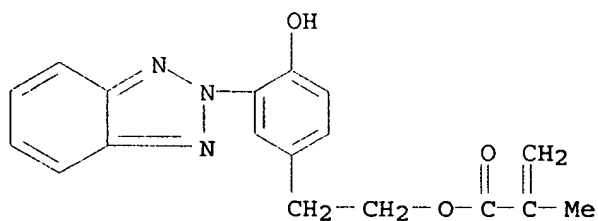
CCI IDS, PMS



CM 3

CRN 96478-09-0

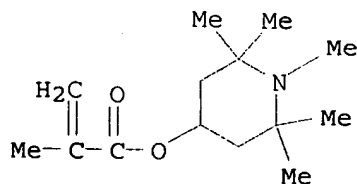
CMF C18 H17 N3 O3



CM 4

CRN 68548-08-3

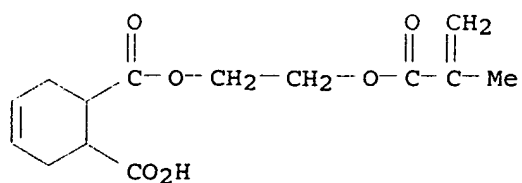
CMF C14 H25 N O2



CM 5

CRN 63306-05-8

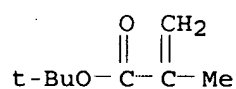
CMF C14 H18 O6



CM 6

CRN 585-07-9

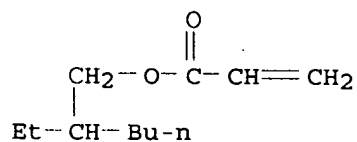
CMF C8 H14 O2



CM 7

CRN 103-11-7

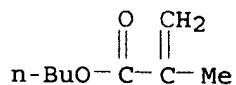
CMF C11 H20 O2



CM 8

CRN 97-88-1

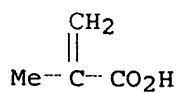
CMF C8 H14 O2



CM 9

CRN 79-41-4

CMF C4 H6 O2



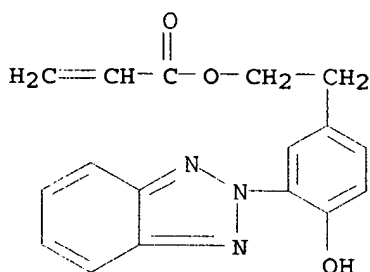
RN 374901-48-1 HCAPLUS

CN 4-Cyclohexene-1,2-dicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, butyl 2-methyl-2-propenoate, cyclohexyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-propenoate, 2-ethylhexyl 2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidiny 2-methyl-2-propenoate and 2,2,6,6-tetramethyl-4-piperidiny 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2

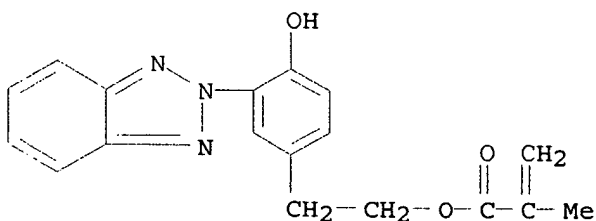
CMF C17 H15 N3 O3



CM 2

CRN 96478-09-0

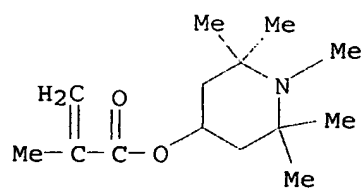
CMF C18 H17 N3 O3



CM 3

CRN 68548-08-3

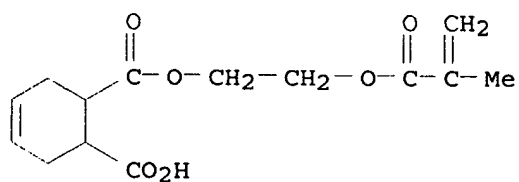
CMF C14 H25 N O2



CM 4

CRN 63306-05-8

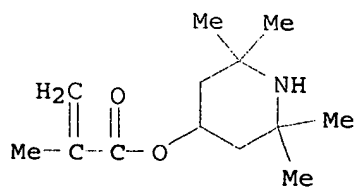
CMF C14 H18 O6



CM 5

CRN 31582-45-3

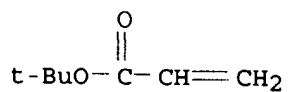
CMF C13 H23 N O2



CM 6

CRN 1663-39-4

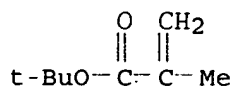
CMF C7 H12 O2



CM 7

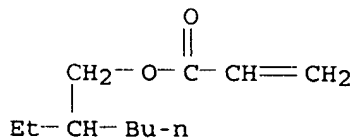
CRN 585-07-9

CMF C8 H14 O2



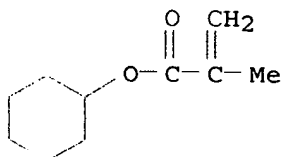
CM 8

CRN 103-11-7
CMF C11 H20 O2



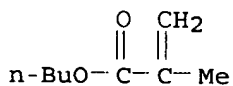
CM 9

CRN 101-43-9
CMF C10 H16 O2



CM 10

CRN 97-88-1
CMF C8 H14 O2



IC ICM C09D133-06
ICS C08F220-12; C09D005-00; C09D157-00; C09D157-12
CC 42-7 (Coatings, Inks, and Related Products)
ST adhesion piperidyl methacrylate **UV absorbing**
acrylic resin coating; storage stability piperidyl methacrylate
UV absorbing acrylic resin coating; soil
resistance piperidyl methacrylate **UV absorbing**
acrylic resin coating; water resistance piperidyl methacrylate
UV absorbing acrylic resin coating
IT Coating materials
(antisoiling, weather-resistant; piperidyl methacrylate- and
UV absorbing (meth)acrylate-containing acrylic
resin aqueous coatings with adhesion to steel plates and other

- coatings)
- IT Fluoropolymers, miscellaneous
(coatings; piperidyl methacrylate- and **UV absorbing** (meth)acrylate-containing acrylic resin aqueous coatings with adhesion to steel plates and other coatings)
- IT Acrylic polymers, uses
(piperidyl methacrylate- and **UV absorbing** (meth)acrylate-containing acrylic resin aqueous coatings with adhesion to steel plates and other coatings)
- IT 374901-41-4P, Tert-Butyl methacrylate-butyl methacrylate-2-ethylhexyl acrylate-methacrylic acid-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2-(2'-hydroxy-5'-acryloxyethylphenyl)-2H-benzotriazole-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2-hydroxy-4-(3-methacryloxy-2-hydroxypropoxy)benzophenone-2-hydroxy-4-(3-acryloxy-2-hydroxypropoxy) benzophenone copolymer 374901-42-5P
374901-43-6P, Tert-butyl methacrylate-butyl methacrylate-2-ethylhexyl acrylate-methacrylic acid-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2-(2'-hydroxy-5'-acryloxyethylphenyl)-2H-benzotriazole-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-Adeka Reasoap NE 40 copolymer **374901-44-7P**
374901-45-8P 374901-46-9P, Tert-Butyl acrylate-tert-butyl methacrylate-ethylene glycol methacrylate tetrahydrophthalate-methacrylic acid-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2-hydroxy-4-(3-methacryloxy-2-hydroxypropoxy) benzophenone-2-hydroxy-4-(3-acryloxy-2-hydroxypropoxy) benzophenone copolymer **374901-48-1P**, Tert-Butyl acrylate-tert-butyl methacrylate-butyl methacrylate-cyclohexyl methacrylate-2-ethylhexyl acrylate-ethylene glycol methacrylate tetrahydrophthalate-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2,2,6,6-tetramethyl-4-piperidyl methacrylate-2-(2'-hydroxy-5'-acryloxyethylphenyl)benzotriazole-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole copolymer
(piperidyl methacrylate- and **UV absorbing** (meth)acrylate-containing acrylic resin aqueous coatings with adhesion to steel plates and other coatings)
- IT 12597-69-2, Steel, miscellaneous
(plates; piperidyl methacrylate- and **UV absorbing** (meth)acrylate-containing acrylic resin aqueous coatings with adhesion to steel plates and other coatings)

L38 ANSWER 7 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:769359 HCAPLUS
DOCUMENT NUMBER: 135:319607
TITLE: Manufacture of coating **compositions**
for lens with ultrahigh refractive index
INVENTOR(S): Takeshita, Katsuyoshi
PATENT ASSIGNEE(S): Seiko Epson Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2001294812	A2	20011023	JP 2000-109403	2000

0411

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PRIORITY APPLN. INFO.:

JP 2000-109403

2000

0411

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AB Title lens with good durability to especially UV-irradiation is manufactured by coating a epithiosulfide bond-containing lens base material having refractive index >1.65, with a **composition** comprising (A) titanium oxide microparticle with particle diameter 1-100 mμ and/or titanium oxide-containing composite microparticles, and (B) a ≥1 polymerizable group-containing silane compound Thus, a plastic lens prepared from bis(2,3-epithiopropyl)disulfide-bis(2-mercaptoethyl)sulfide copolymer containing Seesorb 701 and N,N'-Dimethylcyclohexylamine was coated with a hard coat **composition** comprising γ-Glycidoxypropyltrimethoxysilane, 8RU·A8, L 7604, propylene glycol monomethyl ether, Al(C₅H₇O₂)₃, and Mn(C₅H₇O₂)₃, and cured at 120° for 2 h to give a hard coat lens, showing high refractive index with good durability and antireflection.

IT 368449-39-2P

(hard coat **composition** containing; manufacture of coating **comps.** for lens with ultrahigh refractive index)

RN 368449-39-2 HCAPLUS

CN Silane, dimethoxymethyl[3-(oxiranylmethoxy)propyl]-, polymer with α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]poly(oxy-1,2-ethanediyl) and trimethoxy[3-(oxiranylmethoxy)propyl]silane (9CI) (CA INDEX NAME)

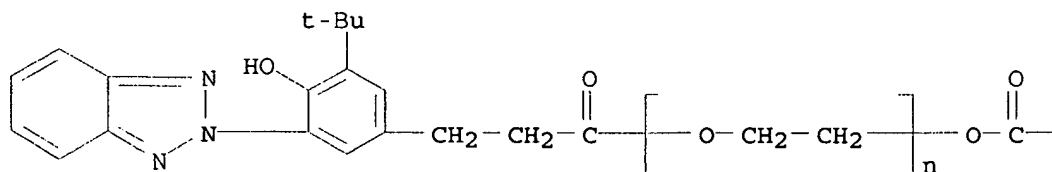
CM 1

CRN 104810-47-1

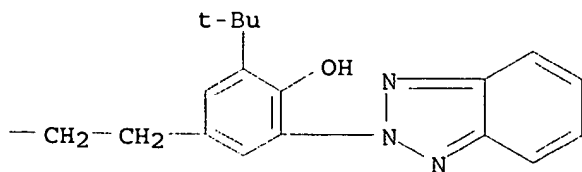
CMF (C2 H4 O)_n C38 H40 N6 O5

CCI PMS

PAGE 1-A



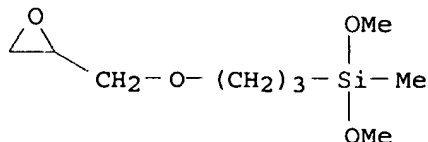
PAGE 1-B



CM 2

CRN 65799-47-5

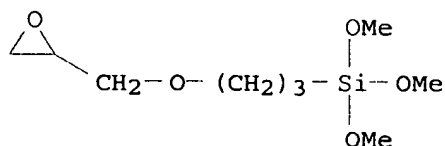
CMF C9 H20 O4 Si



CM 3

CRN 2530-83-8

CMF C9 H20 O5 Si



- IC ICM C09D183-06
ICS C09D001-00; C09D005-00; C09D175-04; C09D183-07; C09D183-08;
G02B001-04; G02B001-11; G02C007-02
- CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 38, 73
- IT Polyoxyalkylenes, uses
(di-Me polysiloxane-, block, hard coat **composition** containing;
manufacture of coating **compns.** for lens with ultrahigh
refractive index)
- IT Polysiloxanes, uses
(di-Me, hydroxypropyl Me, ethers with polyoxyalkylene glycol
mono-Cl-3-alkyl ether, surfactant; manufacture of coating
compns. for lens with ultrahigh refractive index)
- IT Polysiloxanes, uses
(di-Me, polyoxyalkylene-, block, hard coat **composition**
containing; manufacture of coating **compns.** for lens with
ultrahigh refractive index)
- IT Polyethers, uses
(epoxy, hard coat **composition** containing; manufacture of coating
compns. for lens with ultrahigh refractive index)
- IT Antioxidants
Microparticles
(hard coat **composition** containing; manufacture of coating
compns. for lens with ultrahigh refractive index)
- IT Antireflective films
Lenses
Primers (paints)
Surfactants
UV stabilizers
(manufacture of coating **compns.** for lens with ultrahigh
refractive index)
- IT Silsesquioxanes
(manufacture of coating **compns.** for lens with ultrahigh

- refractive index)
- IT Epoxy resins, uses
(polyether-, hard coat **composition** containing; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT Polysiloxanes, uses
(polyoxyalkylene-, FZ-2110; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT Polyoxyalkylenes, uses
(polysiloxane-, FZ-2110; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT Oxides (inorganic), uses
(primer containing; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT Epoxy resins, uses
(thio-, polythioether-, plastic lens containing; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT Polyurethanes, uses
(thio-, primer **composition** containing; manufacture of primer **compns.** for lens with ultrahigh refractive index)
- IT Polythioethers
(thioepoxy, plastic lens containing; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 2440-22-4, Seesorb 701 25973-55-1, Tinuvin 328
(UV **absorber**; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 119-47-1, Antage W400
(antioxidant; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 368878-25-5, 8RU-A8
(coating **composition** containing; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 185828-79-9, Optolake 1832
(colloidal; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 56325-93-0P, γ -Glycidoxypropyltrimethoxysilane homopolymer
162477-44-3P 368449-39-2P
(hard coat **composition** containing; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 1314-23-4, Zirconium dioxide, uses 13463-67-7, Titanium oxide, uses 18282-10-5, Tin dioxide
(hard coat **composition** containing; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 39317-73-2, Denacol EX-313
(hard coat **composition** containing; manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 103296-84-0P, 1,2-Bis(glycidylthio)ethane
(intermediate; preparation of bis(epithiopropylthio)ethane monomer in manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 7631-86-9, Oscal 1832, uses
(manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 188829-92-7P
(monomer; preparation of bis(epithiopropylthio)ethane monomer in manufacture of coating **compns.** for lens with ultrahigh refractive index)
- IT 188830-00-4P, 1,2-Bis(β -epithiopropylthio)ethane homopolymer
215032-48-7P 368453-05-8P
(plastic lens containing; manufacture of coating **compns.** for

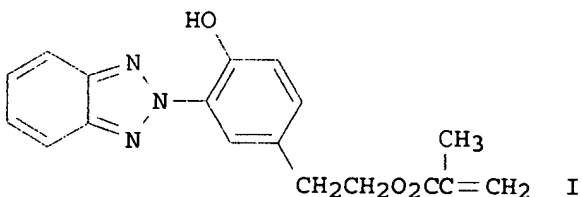
lens with ultrahigh refractive index)
 IT 96645-57-7P 96663-95-5P, 1,10-Decanedithiol-hexamethylene
 diisocyanate copolymer
 (primer **composition** containing; manufacture of primer
compns. for lens with ultrahigh refractive index)
 IT 106-89-8, Epichlorohydrin, reactions 540-63-6,
 1,2-Dimercaptoethane
 (starting material; preparation of bis(epithiopropylthio)ethane
 monomer in manufacture of coating **compns.** for lens with
 ultrahigh refractive index)

L38 ANSWER 8 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:661527 HCAPLUS
 DOCUMENT NUMBER: 135:228291
 TITLE: Manufacture of curable acrylic coatings
 containing copolymerized UV stabilizers
 INVENTOR(S): Sapper, Ekkehard; Baumgart, Hubert
 PATENT ASSIGNEE(S): Basf Coatings A.-G., Germany
 SOURCE: PCT Int. Appl., 55 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001064803	A1	20010907	WO 2001-EP2285	2001 0301
<--				
DE 10010416	A1	20010913	DE 2000-10010416	2000 0303
<--				
PRIORITY APPLN. INFO.:			DE 2000-10010416	A 2000 0303
<--				

GI



AB Phys.- or thermally- and/or radiation-curable **compns.**
 for clear or pigmented coatings with good chemical and weathering
 resistance comprise ≥ 1 (meth)acrylate copolymer containing
 ≥ 1 polymerizable UV stabilizer built-in as a comonomer into
 acrylic polymer. For example, a heat-cured solvent-based clear

lacquer comprised a mixture of a tris(alkoxycarbonylamino)triazine crosslinker (alkyl group unspecified) with acrylic acid-Bu methacrylate-2-ethylhexyl methacrylate-2-hydroxyethyl acrylate-2-hydroxypropyl methacrylate-styrene copolymer with benzotriazolyl derivative I.

IT 358974-49-9P 358974-50-2P

(curable acrylic coatings with good chemical and weathering resistance containing copolymd. UV stabilizers)

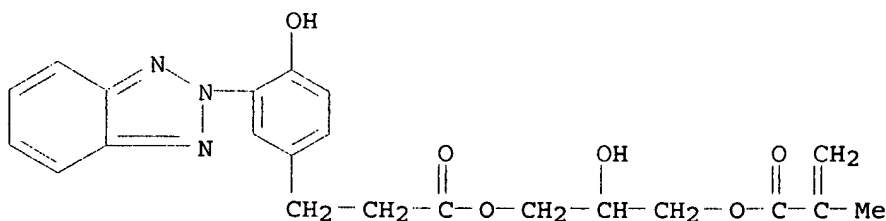
RN 358974-49-9 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-propenoate, 2-hydroxypropyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 135590-39-5

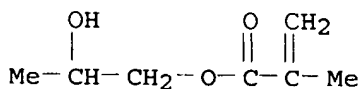
CMF C22 H23 N3 O6



CM 2

CRN 923-26-2

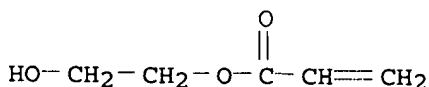
CMF C7 H12 O3



CM 3

CRN 818-61-1

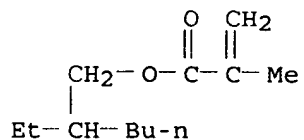
CMF C5 H8 O3



CM 4

CRN 688-84-6

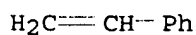
CMF C12 H22 O2



CM 5

CRN 100-42-5

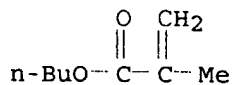
CMF C8 H8



CM 6

CRN 97-88-1

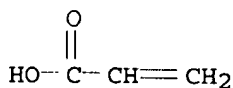
CMF C8 H14 O2



CM 7

CRN 79-10-7

CMF C3 H4 O2



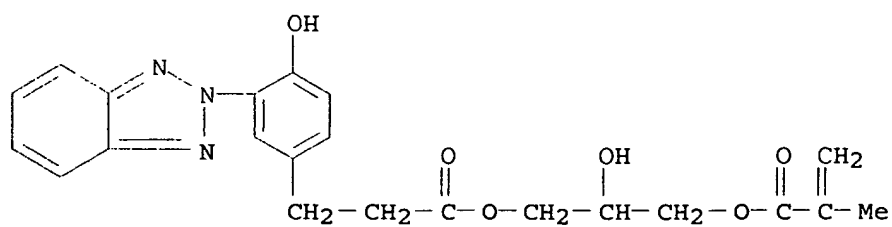
RN 358974-50-2 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with butyl 2-methyl-2-propenoate, cyclohexyl 2-methyl-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxypropyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 135590-39-5

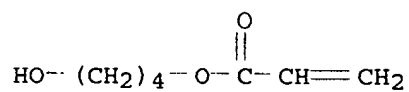
CMF C22 H23 N3 O6



CM 2

CRN 2478-10-6

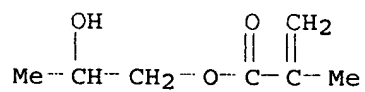
CMF C7 H12 O3



CM 3

CRN 923-26-2

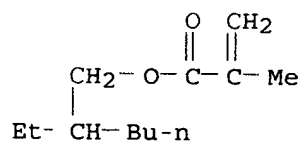
CMF C7 H12 O3



CM 4

CRN 688-84-6

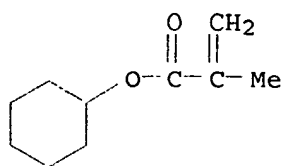
CMF C12 H22 O2



CM 5

CRN 101-43-9

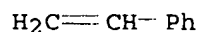
CMF C10 H16 O2



CM 6

CRN 100-42-5

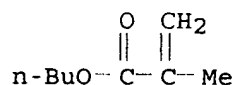
CMF C8 H8



CM 7

CRN 97-88-1

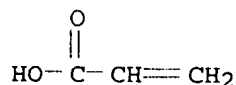
CMF C8 H14 O2



CM 8

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09D157-12

ICS B05D007-00

CC 42-10 (Coatings, Inks, and Related Products)

ST acrylic curable coating polymerizable **UV absorber** benzotriazolyl deriv; UV stabilizer polymerizable benzotriazolyl deriv acrylic coating; benzotriazolyl hydroxyphenylethyl methacrylate polymerizable UV stabilizer acrylic coating

IT 358974-47-7P 358974-48-8P 358974-49-9P

358974-50-2P 358974-51-3P

(curable acrylic coatings with good chemical and weathering resistance containing copolymerized UV stabilizers)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 9 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:628742 HCAPLUS
 DOCUMENT NUMBER: 135:196989
 TITLE: Room-temperature-curable modified silicone
 sealing **compositions** with weather
 resistance
 INVENTOR(S): Mori, Hiroshi
 PATENT ASSIGNEE(S): Ohtsuka Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: **Patent**
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2001234072	A2	20010828	JP 2000-47794	2000 0224
			<--	
JP 3280949	B2	20020513		
PRIORITY APPLN. INFO.:			JP 2000-47794	2000 0224

AB Title **compns.** contain 100 parts reactive silyl
 group-containing polyethers, 0.01-20 parts aminosilanes, 2-20 parts
 polymeric **UV absorbers** prepared from
 (meth)acrylic benzotriazoles and/or (meth)acrylic triazines 10-50,
 reactive silyl-containing vinyl compds. 5-20, (meth)acrylate esters
 25-85, and polymerizable hindered amines 0-2%, and 0.01-20 parts
 Sn catalysts. A **composition** comprising MS polymer S 203 100,
 TSL 8340 2, 4:3:3 trimethoxysilylpropyl methacrylate-
 tris(trimethylsiloxy)silylpropyl methacrylate-RUVA 93 copolymer 2,
 Tinuvin 123 0.05, a Sn catalyst 2, and additives 135 parts showed
 maximum tensile stress 72 N/cm² and elongation 450% initially and 79
 and 380, resp. after 2,000 h under dew-cycle weatherometer.

IT **356566-76-2P 357166-93-9P**
 (room temperature-curable **UV absorber**-polymerized
 polyether silicone sealants with weather resistance)

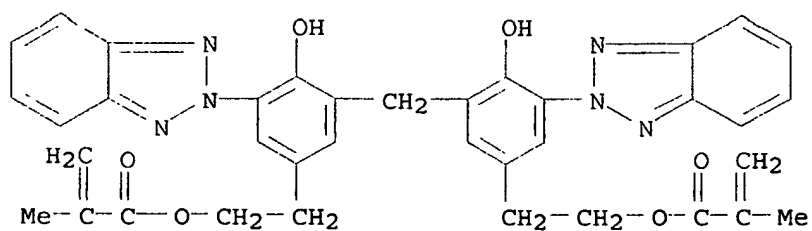
RN 356566-76-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-
 yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester, polymer with
 methyl 2-methyl-2-propenoate, MS Polymer S 903,
 N-[3-(trimethoxysilyl)propyl]-1,2-ethanediamine and
 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX
 NAME)

CM 1

CRN 263909-63-3

CMF C37 H34 N6 O6



CM 2

CRN 183510-69-2

CMF Unspecified

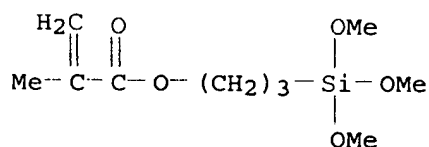
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 2530-85-0

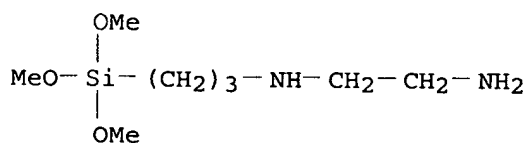
CMF C10 H20 O5 Si



CM 4

CRN 1760-24-3

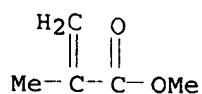
CMF C8 H22 N2 O3 Si



CM 5

CRN 80-62-6

CMF C5 H8 O2



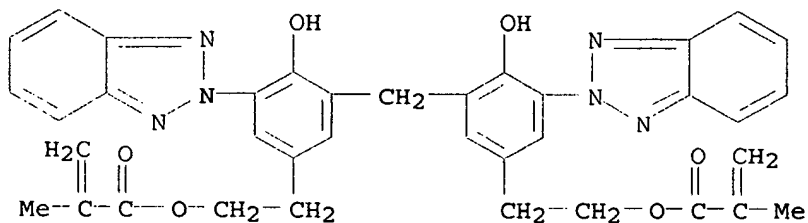
RN 357166-93-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester, polymer with Kaneka MS Polymer S 203, methyl 2-methyl-2-propenoate, N-[3-(trimethoxysilyl)propyl]-1,2-ethanediamine and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-63-3

CMF C37 H34 N6 O6



CM 2

CRN 178535-69-8

CMF Unspecified

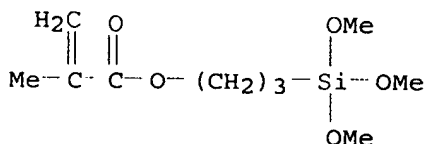
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 2530-85-0

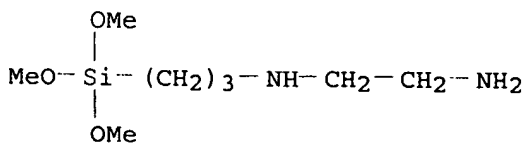
CMF C10 H20 O5 Si



CM 4

CRN 1760-24-3

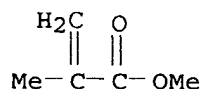
CMF C8 H22 N2 O3 Si



CM 5

CRN 80-62-6

CMF C5 H8 O2

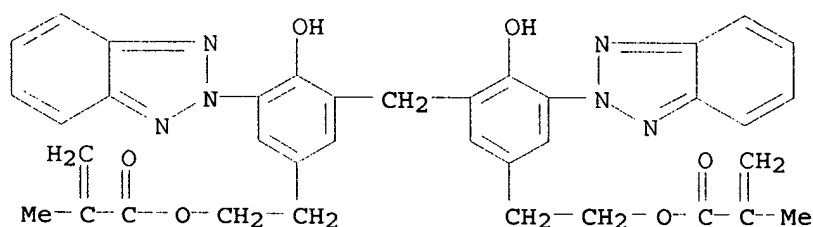


IT 263909-63-3P

(room temperature-curable **UV absorber**-polymerized polyether silicone sealants with weather resistance)

RN 263909-63-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)



IC ICM C08L083-12

ICS C08F220-06; C08F220-10; C08F220-36; C08F220-60; C08K005-544;
C08K005-57; C08L033-14; C09K003-00; C09D171-00; C09D183-06;
C09J171-00; C09J183-06; C09K003-10

CC 42-11 (Coatings, Inks, and Related Products)

ST room temp curable polyether polysiloxane sealant weather resistance; **UV absorber** contg polyether polysiloxane sealant

IT Polysiloxanes, uses

(acrylic-polyether-; room temperature-curable **UV absorber**-polymerized polyether silicone sealants with weather resistance)

IT Polyethers, uses

(acrylic-polysiloxane-; room temperature-curable **UV absorber**-polymerized polyether silicone sealants with weather resistance)

IT UV stabilizers

(polymeric; room temperature-curable **UV absorber**-polymerized polyether silicone sealants with weather resistance)

IT Sealing compositions

(room-temperature-curable; room temperature-curable **UV absorber**-polymerized polyether silicone sealants with weather resistance)

IT 356566-74-0P 356566-75-1P 356566-76-2P 357166-90-6P

357166-91-7P 357166-92-8P 357166-93-9P 357166-94-0P

(room temperature-curable **UV absorber**-polymerized polyether silicone sealants with weather resistance)

IT 103597-49-5P 215998-14-4P 263909-48-4P 263909-63-3P

(room temperature-curable **UV absorber**-polymerized polyether silicone sealants with weather resistance)

IT 50-00-0, Formaldehyde, reactions 109-89-7, Diethylamine, reactions 2440-22-4 96478-09-0, 2-(2'-Hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole (room temperature-curable **UV absorber**-polymerized polyether silicone sealants with weather resistance)

L38 ANSWER 10 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

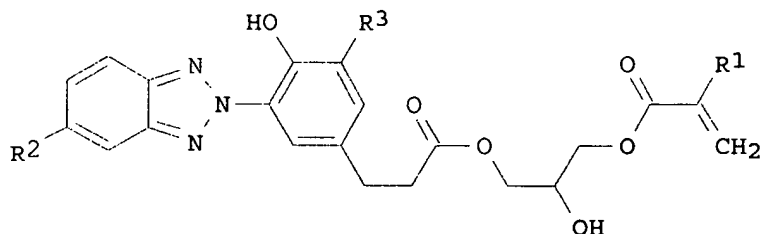
ACCESSION NUMBER: 2001:602587 HCAPLUS
DOCUMENT NUMBER: 135:196940
TITLE: 1UV-shielding aqueous coating **compositions**
INVENTOR(S): Ishii, Takafumi; Takaesu, Noboru
PATENT ASSIGNEE(S): Nisseki Mitsubishi Oil Corporation, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2001226623	A2	20010821	JP 2000-33606	2000 0210

PRIORITY APPLN. INFO.:

<--
JP 2000-33606
2000
0210

OTHER SOURCE(S): MARPAT 135:196940
GI



I

AB Title **compsns.** comprise (a) $\geq 20\%$ water, (b) $\geq 3\%$ hydrophilic solvents, (c) 3-50% acrylic polymers prepared from (c1) $\geq 50\%$ (based on total monomers) blends of 1-90:10-99 I ($R_1 = H, Me$; $R_2 = \text{halogen}, H$; $R_3 = H, C_1-5 \text{ alkyl}$) and (meth)acrylate esters and (c2) 0.3-5 mol/kg COOH-containing vinyl compds. [(meth)acrylic acid and/or α, β -unsatd. β -carboxy carboxylic acids], (d) 0.5-1.1 equiv (based on COOH in the acrylic polymers) NH_3 and/or amines, and (e) 0.01-3 equiv epoxy compds. with epoxy equivalent of ≥ 500 . A glass plate was brushed with **composition** comprising water 79.6, organic solvents 10.4, and a polymer [consisting of 10:10:30:50 methacrylic acid-Me methacrylate-2-ethylhexyl acrylate-I (with $R_1 = Me, R_2 = Cl, R_3 = Et$) copolymer NH_3 salt and Epikote 1044] 10% and baked at 150° for 20 min to form a film with pencil hardness H, good

adhesion, and 390-nm UV transparency 0.3%.

IT 355018-33-6P 355018-36-9P 356046-09-8P

356046-11-2P 356046-15-6P 356046-18-9P

(benzotriazole (meth)acrylate-containing acrylic epoxy resin-based aqueous coatings with UV-shielding ability)

RN 355018-33-6 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with Epikote 1001B80, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, compd. with 2-aminoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 141-43-5

CMF C2 H7 N O

H₂N-CH₂-CH₂-OH

CM 2

CRN 355018-32-5

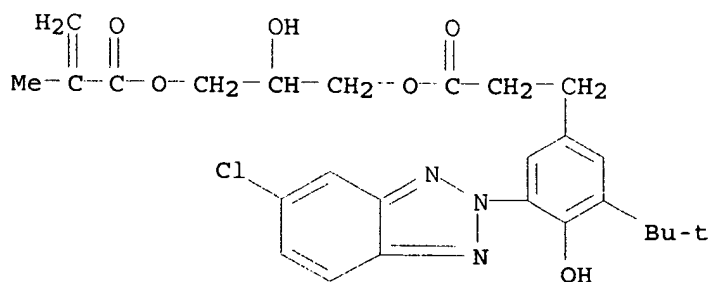
CMF (C₂₆ H₃₀ Cl N₃ O₆ . C₁₁ H₂₀ O₂ . C₅ H₈ O₂ . C₄ H₆ O₂ . Unspecified)x

CCI PMS

CM 3

CRN 253588-79-3

CMF C₂₆ H₃₀ Cl N₃ O₆



CM 4

CRN 117681-05-7

CMF Unspecified

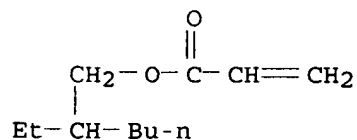
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

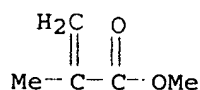
CRN 103-11-7

CMF C11 H20 O2



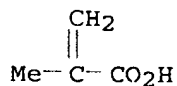
CM 6

CRN 80-62-6
 CMF C5 H8 O2



CM 7

CRN 79-41-4
 CMF C4 H6 O2

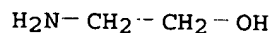


RN 355018-36-9 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxyl]propyl ester, polymer with (chloromethyl)oxirane, 4,5-dihydro-2-methyloxazole, 2-(1-ethylhexyl)oxazole, 2-ethylhexyl 2-propenoate, 4,4'-(1-methylethylidene)bis[phenol], methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, compd. with 2-aminoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 141-43-5
 CMF C2 H7 N O



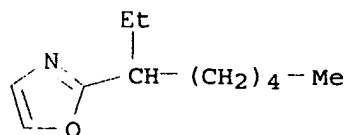
CM 2

CRN 355018-35-8
 CMF (C26 H30 Cl N3 O6 . C15 H16 O2 . C11 H20 O2 . C11 H19 N O . C5 H8 O2 . C4 H7 N O . C4 H6 O2 . C3 H5 Cl O)x
 CCI PMS

CM 3

CRN 355018-34-7

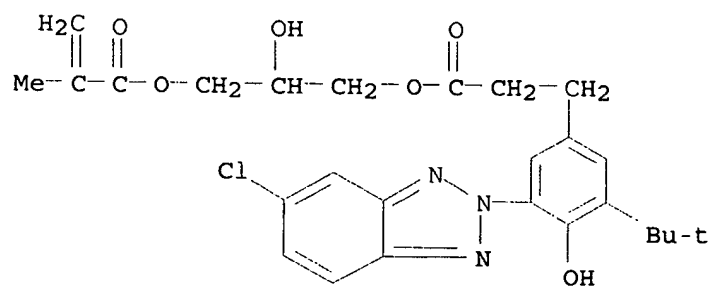
CMF C11 H19 N O



CM 4

CRN 253588-79-3

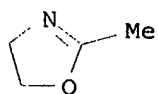
CMF C26 H30 Cl N3 O6



CM 5

CRN 1120-64-5

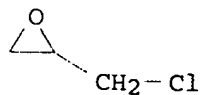
CMF C4 H7 N O



CM 6

CRN 106-89-8

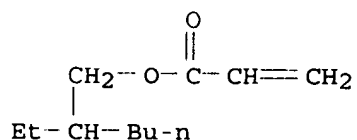
CMF C3 H5 Cl O



CM 7

CRN 103-11-7

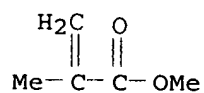
CMF C11 H20 O2



CM 8

CRN 80-62-6

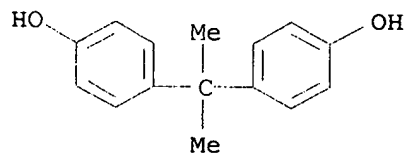
CMF C5 H8 O2



CM 9

CRN 80-05-7

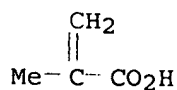
CMF C15 H16 O2



CM 10

CRN 79-41-4

CMF C4 H6 O2



RN 356046-09-8 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-ethyl-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with Epikote 1044, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 356046-08-7

CMF (C24 H26 Cl N3 O6 . C11 H20 O2 . C5 H8 O2 . C4 H6 O2 . Unspecified)x

CCI PMS

CM 2

CRN 356043-14-6

CMF Unspecified

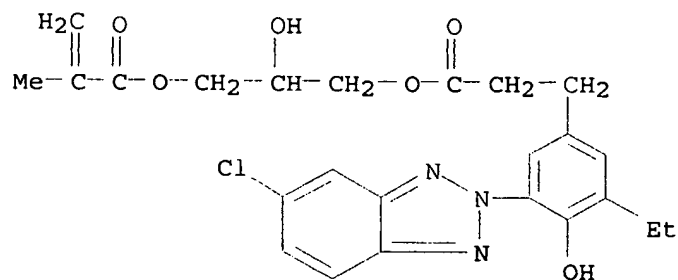
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 295777-85-4

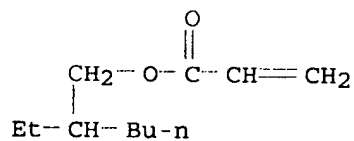
CMF C24 H26 C1 N3 O6



CM 4

CRN 103-11-7

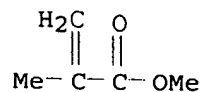
CMF C11 H20 O2



CM 5

CRN 80-62-6

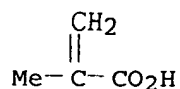
CMF C5 H8 O2



CM 6

CRN 79-41-4

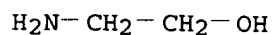
CMF C4 H6 O2



RN	356046-11-2	HCAPLUS
CN	Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl ester, polymer with Adeka Bon-Tighter HUX-XW 5, N-(butoxymethyl)-2-methyl-2-propenamide, butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, compd. with 2-aminoethanol (9CI) (CA INDEX NAME)	

CM 1

CRN 141-43-5
CMF C2 H7 N O



CM 2

```
CRN 356046-10-1
CMF (C25 H28 Cl N3 O6 . C9 H17 N O2 . C7 H12 O2 . C5 H8 O2 . C4
H6 O2 . Unspecified)x
CCI PMS
```

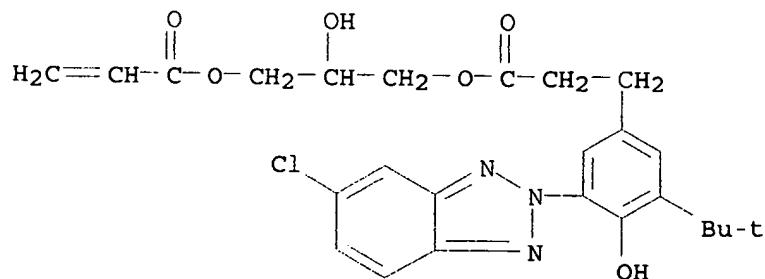
CM 3

CRN 356044-67-2
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

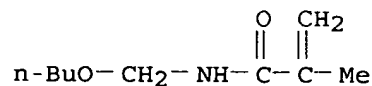
CM 4

CRN 253588-78-2
CMF C25 H28 C1 N3 O6



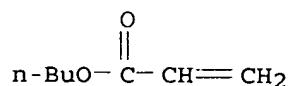
CM 5

CRN 5153-77-5
CMF C9 H17 N O2



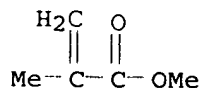
CM 6

CRN 141-32-2
CMF C7 H12 O2



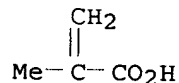
CM 7

CRN 80-62-6
CMF C5 H8 O2



CM 8

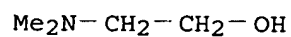
CRN 79-41-4
CMF C4 H6 O2



RN 356046-15-6 HCAPLUS
CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-5-methyl-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 1-cyclohexyl-1H-pyrrole-2,5-dione, ethyloxirane block polymer with methyloxirane and oxirane hydrogen (2Z)-2-butenedioate methyl dihydrogen phosphate, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], 2-methyl-2-propenamide, phenylmethyl 2-propenoate and 2-propenoic acid, compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0
CMF C4 H11 N O



CM 2

CRN 356046-14-5

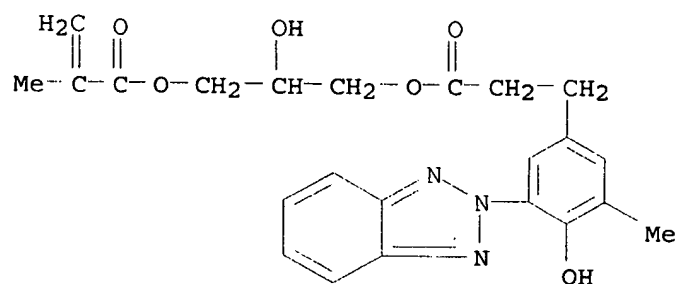
CMF (C23 H25 N3 O6 . C21 H24 O4 . C10 H13 N O2 . C10 H10 O2 . (C4
H8 O . C3 H6 O . C2 H4 O)x . C4 H7 N O . x C4 H4 O4 . C3 H4
O2 . x C H5 O4 P)x

CCI PMS

CM 3

CRN 356046-13-4

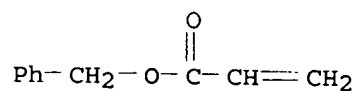
CMF C23 H25 N3 O6



CM 4

CRN 2495-35-4

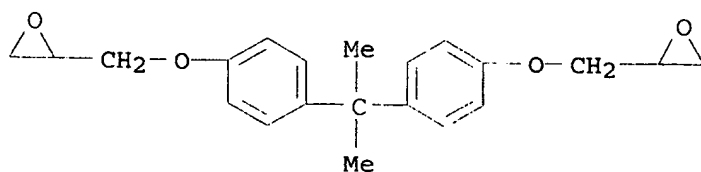
CMF C10 H10 O2



CM 5

CRN 1675-54-3

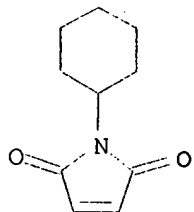
CMF C21 H24 O4



CM 6

CRN 1631-25-0

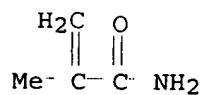
CMF C10 H13 N O2



CM 7

CRN 79-39-0

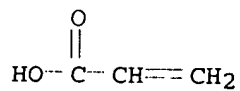
CMF C4 H7 N O



CM 8

CRN 79-10-7

CMF C3 H4 O2



CM 9

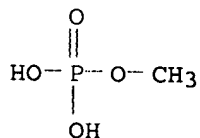
CRN 356046-12-3

CMF (C4 H8 O . C3 H6 O . C2 H4 O)x . x C4 H4 O4 . x C H5 O4 P

CM 10

CRN 812-00-0

CMF C H5 O4 P

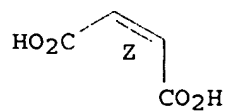


CM 11

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



CM 12

CRN 166089-41-4

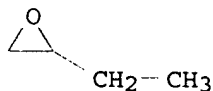
CMF (C4 H8 O . C3 H6 O . C2 H4 O) x

CCI PMS

CM 13

CRN 106-88-7

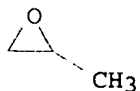
CMF C4 H8 O



CM 14

CRN 75-56-9

CMF C3 H6 O



CM 15

CRN 75-21-8

CMF C2 H4 O



RN 356046-18-9 HCAPLUS

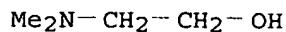
CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-5-methyl-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 1-cyclohexyl-1H-pyrrole-2,5-dione, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxira

ne], 2-methyl-2-propenamide, phenylmethyl 2-propenoate,
 $\alpha, \alpha', \alpha''$ -1,2,3-propanetriyltris[ω -
 hydroxypoly(oxy-1,2-ethanediyl)] hydrogen 1,2-benzenedicarboxylate
 and 2-propenoic acid, compd. with 2-(dimethylamino)ethanol (9CI)
 (CA INDEX NAME)

CM 1

CRN 108-01-0

CMF C4 H11 N O



CM 2

CRN 356046-17-8

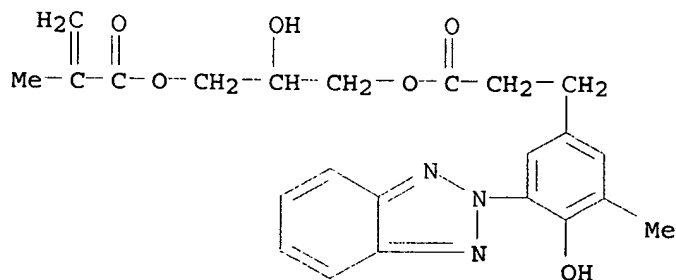
CMF (C23 H25 N3 O6 . C21 H24 O4 . C10 H13 N O2 . C10 H10 O2 . C8
 H6 O4 . C4 H7 N O . C3 H4 O2 . x (C2 H4 O)n (C2 H4 O)n (C2 H4
 O)n C3 H8 O3)x

CCI PMS

CM 3

CRN 356046-13-4

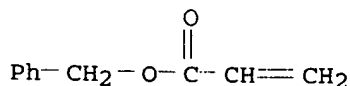
CMF C23 H25 N3 O6



CM 4

CRN 2495-35-4

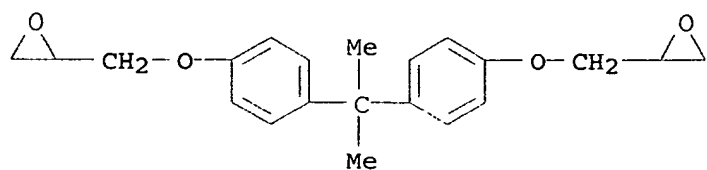
CMF C10 H10 O2



CM 5

CRN 1675-54-3

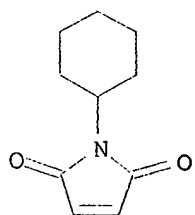
CMF C21 H24 O4



CM 6

CRN 1631-25-0

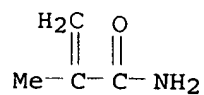
CMF C10 H13 N O2



CM 7

CRN 79-39-0

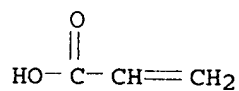
CMF C4 H7 N O



CM 8

CRN 79-10-7

CMF C3 H4 O2



CM 9

CRN 356046-16-7

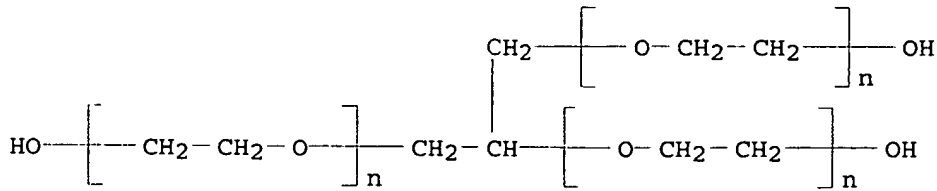
CMF C8 H6 O4 . x (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C3 H8 O3

CM 10

CRN 31694-55-0

CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C3 H8 O3

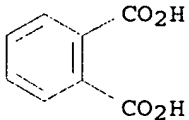
CCI PMS



CM 11

CRN 88-99-3

CMF C8 H6 O4



IC ICM C09D133-06
ICS C09D005-00; C09D163-00
CC 42-10 (Coatings, Inks, and Related Products)
ST UV shielding aq acrylic epoxy resin coating; benzotriazole acrylic
UV absorber resin aq coating
IT 355018-33-6P 355018-36-9P 356046-09-8P
356046-11-2P 356046-15-6P 356046-18-9P
(benzotriazole (meth)acrylate-containing acrylic epoxy resin-based
aqueous coatings with UV-shielding ability)

L38 ANSWER 11 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:555251 HCAPLUS

DOCUMENT NUMBER: 135:138797

TITLE: Nonyellowing UV-curable coating compositions and manufacture of laminates therewith

INVENTOR(S) : Ito, Shigekazu; Tsukuda, Hiroyuki; Take,
Kazunobu; Iyota, Takeshi

PATENT ASSIGNEE(S): Riken Vinyl Industry Co., Ltd., Japan; Nikko Kagaku Kenkyusho

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE : Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	

JP 2001207086	A2	20010731	JP 2000-20597	2000 0128

← - -

PRIORITY APPLN. INFO.:

JP 2000-20597

2000
0128

<--

AB Title **comps.** contain nonarom. (meth)acrylates 100, (meth)acrylic **UV absorbers** 3-20, photochem. initiators 0.1-10, thio sensitizers 0.5-40, and polyisocyanates 0-50 parts. A PET film was coated with a **composition** containing dipentaerythritol hexaacrylate 100, RUVA 93 12.5, Irgacure 1800 6.0, pentaerythritol tetrakis(3-mercaptopropionate) 5, and PhMe 200 parts and cured with UV to form a hard film showing good coating adhesion and yellowing prevention after 100 h under weatherometer at 63°.

IT **351884-43-0P 351884-44-1P**

(UV-curable polythiol-containing polyacrylate nonyellowing and hard coatings with good adhesion to plastics)

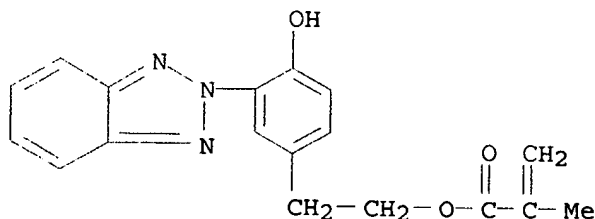
RN 351884-43-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate) and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

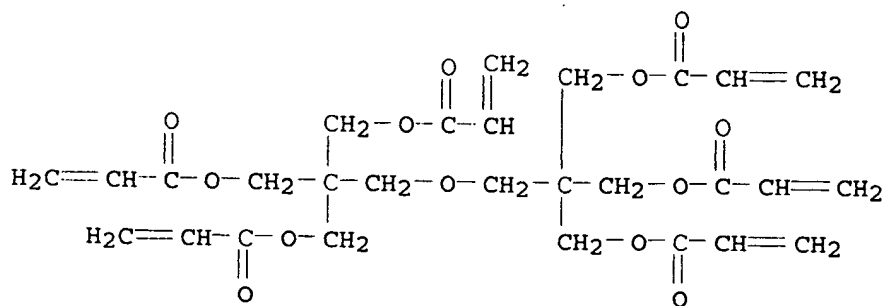
CMF C18 H17 N3 O3



CM 2

CRN 29570-58-9

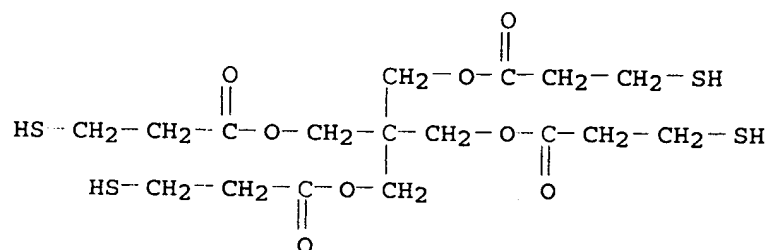
CMF C28 H34 O13



CM 3

CRN 7575-23-7

CMF C17 H28 O8 S4



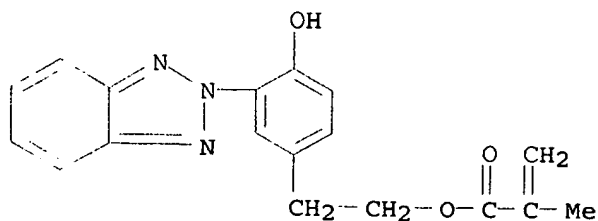
RN 351884-44-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate), 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

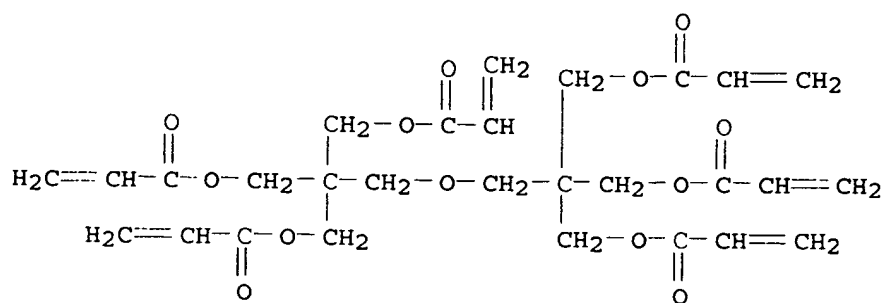
CMF C18 H17 N3 O3



CM 2

CRN 29570-58-9

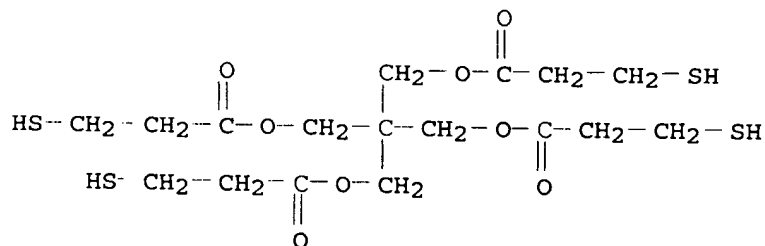
CMF C28 H34 O13



CM 3

CRN 7575-23-7

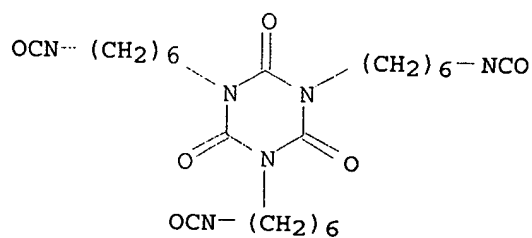
CMF C17 H28 O8 S4



CM 4

CRN 3779-63-3

CMF C24 H36 N6 O6



IC ICM C09D004-02

ICS B32B031-28; C09D005-00; C09D175-04

CC 42-10 (Coatings, Inks, and Related Products)

IT 351884-43-0P 351884-44-1P

(UV-curable polythiol-containing polyacrylate nonyellowing and hard coatings with good adhesion to plastics)

L38 ANSWER 12 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:479864 HCAPLUS

DOCUMENT NUMBER: 135:78277

TITLE: Storage-stable aqueous acrylic coating

USHA SHRESTHA EIC 1700 REM 4B28

INVENTOR(S): **compositions** with good adhesion to other resin coatings
 Tanaka, Motomi; Fukizumi, Tatsushi; Ito, Takaaki
 PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: **Patent**
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001181555	A2	20010703	JP 1999-366358	1999 1224

PRIORITY APPLN. INFO.: <-- JP 1999-366358

1999
1224

AB Title **compns.**, also showing good soil, water, and weather resistance, comprise polyhydrazines and polymers pred. from CH₂:CRCOOC(CH₃)₃ (R = H or C1-2 alkyl) 5-80, **UV-absorbing** ethylenic unsatd. compds. 0.1-10, ethylenic unsatd. carboxylic acids 0.1-10, CO- or CHO-containing ethylenic unsatd. compds. 0.5-10, and other ethylenic unsatd. compds. 0-94.3%. An aqueous **composition** containing adipic dihydrazide and Bu methacrylate-tert-Bu methacrylate-diacetone acrylamide-2-ethylhexyl acrylate-methacrylic acid-2-(2'-Hydroxy-5'-acryloxyethylphenyl)-2H-benzotriazole-2-(2'-Hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-Adeka Reasoap NE 40 copolymer showed no precipitation after storing at 40° for 168 h then at room temperature for 1 mo and formed into films with good adhesion to Lumiflon FE 4000 or acrylic emulsion coatings, soil (outdoor, 6 mo), water, and weather resistance.

IT **346433-00-9P 346433-03-2P 346433-05-4P**
 (aqueous tert-Bu (meth)acrylate resin coatings with adhesion to other resin coatings)

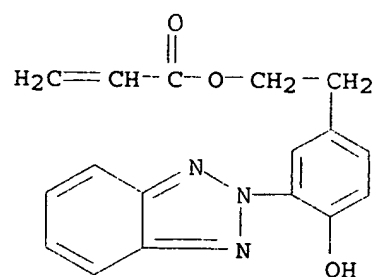
RN 346433-00-9 HCAPLUS

CN 1,2-Cyclohexanedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate, hexanedioic acid dihydrazide and α-[1-[(nonylphenoxy)methyl]-2-(2-propenyloxy)ethyl]-ω-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2

CMF C17 H15 N3 O3

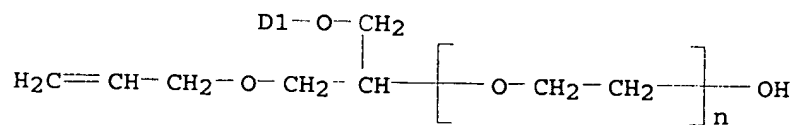


CM 2

CRN 111144-60-6

CMF (C2 H4 O)_n C21 H34 O3

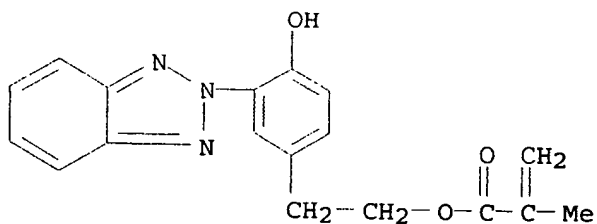
CCI IDS, PMS

D1-- (CH₂)₈ - Me

CM 3

CRN 96478-09-0

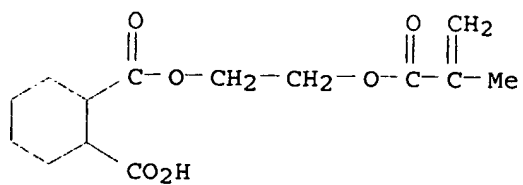
CMF C18 H17 N3 O3



CM 4

CRN 51252-88-1

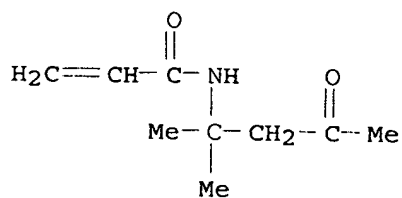
CMF C14 H20 O6



CM 5

CRN 2873-97-4

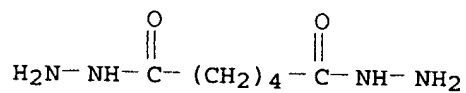
CMF C9 H15 N O2



CM 6

CRN 1071-93-8

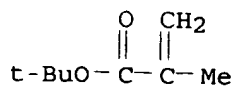
CMF C6 H14 N4 O2



CM 7

CRN 585-07-9

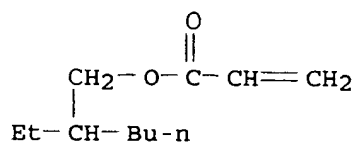
CMF C8 H14 O2



CM 8

CRN 103-11-7

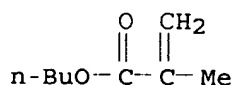
CMF C11 H20 O2



CM 9

CRN 97-88-1

CMF C8 H14 O2



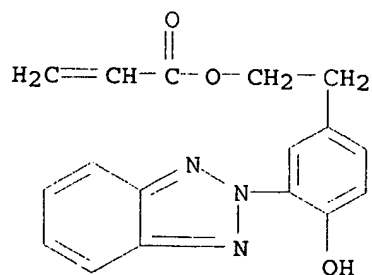
RN 346433-03-2 HCAPLUS

CN 1,2-Cyclohexanedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate and hexanedioic acid dihydrazide (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2

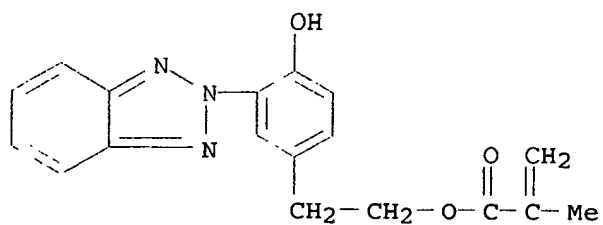
CMF C17 H15 N3 O3



CM 2

CRN 96478-09-0

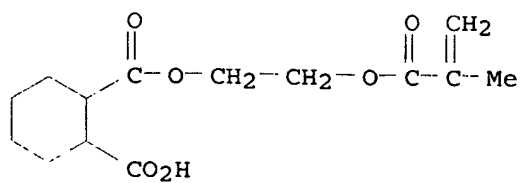
CMF C18 H17 N3 O3



CM 3

CRN 51252-88-1

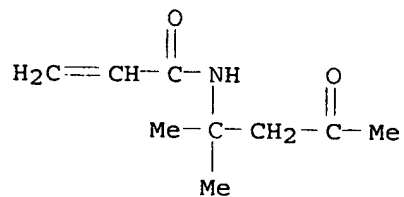
CMF C14 H20 O6



CM 4

CRN 2873-97-4

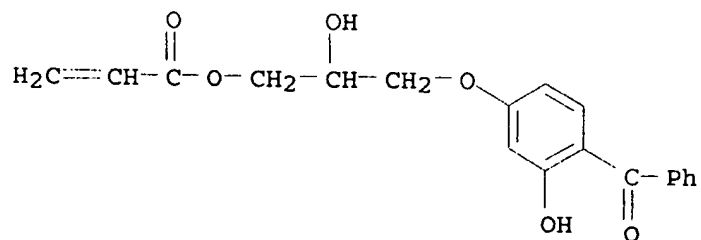
CMF C9 H15 N O2



CM 5

CRN 1843-07-8

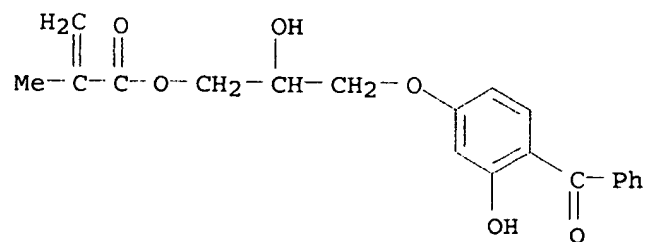
CMF C19 H18 O6



CM 6

CRN 1823-18-3

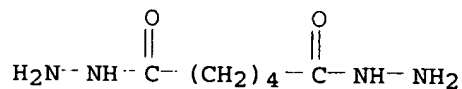
CMF C20 H20 O6



CM 7

CRN 1071-93-8

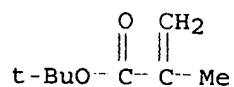
CMF C6 H14 N4 O2



CM 8

CRN 585-07-9

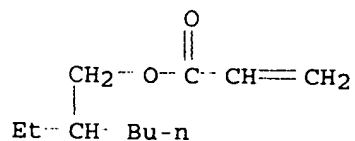
CMF C8 H14 O2



CM 9

CRN 103-11-7

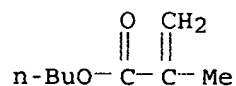
CMF C11 H20 O2



CM 10

CRN 97-88-1

CMF C8 H14 O2



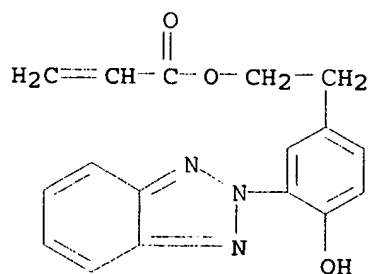
RN 346433-05-4 HCAPLUS

CN 1,2-Cyclohexanedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate and hexanedioic acid dihydrazide (9CI)
(CA INDEX NAME)

CM 1

CRN 170103-27-2

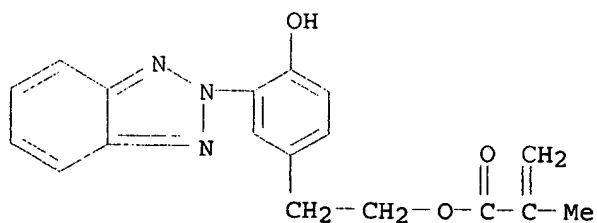
CMF C17 H15 N3 O3



CM 2

CRN 96478-09-0

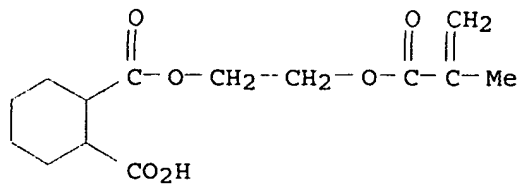
CMF C18 H17 N3 O3



CM 3

CRN 51252-88-1

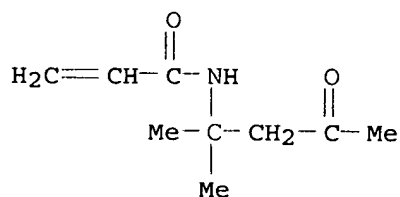
CMF C14 H20 O6



CM 4

CRN 2873-97-4

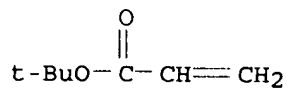
CMF C9 H15 N O2



CM 5

CRN 1663-39-4

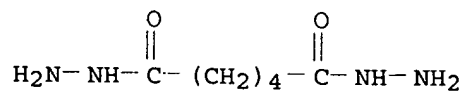
CMF C7 H12 O2



CM 6

CRN 1071-93-8

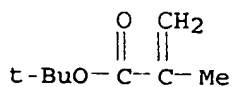
CMF C6 H14 N4 O2



CM 7

CRN 585-07-9

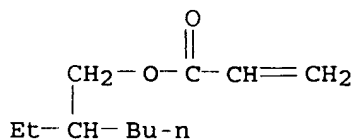
CMF C8 H14 O2



CM 8

CRN 103-11-7

CMF C11 H20 O2



IC ICM C09D133-06

ICS C09D005-00

CC 42-7 (Coatings, Inks, and Related Products)

IT 346432-97-1P 346432-98-2P 346432-99-3P **346433-00-9P**346433-01-0P 346433-02-1P **346433-03-2P** 346433-04-3P**346433-05-4P**

(aqueous tert-Bu (meth)acrylate resin coatings with adhesion to other resin coatings)

L38 ANSWER 13 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:167767 HCAPLUS

DOCUMENT NUMBER: 134:212779

TITLE: Hydrophobically-bound, hydrophilic (meth)acrylic polymer coating **compositions** for surgical implants

INVENTOR(S): Leboeuf, Albert R.

PATENT ASSIGNEE(S): Alcon Universal Ltd., Switz.

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: **Patent**

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001015627	A1	20010308	WO 2000-US23228	2000 0824
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CA 2381270	AA	20010308	CA 2000-2381270	2000 0824
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BR 2000013722	A	20020507	BR 2000-13722	2000 0824
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US 6388035	B1	20020514	US 2000-645274	2000 0824

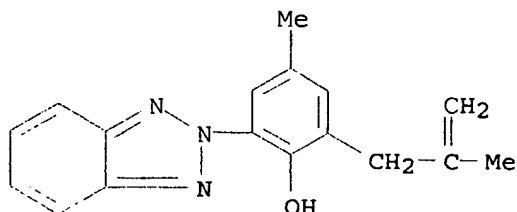
EP 1207808	A1	20020529	EP 2000-955871	
				2000 0824
EP 1207808	B1	20050112		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
JP 2003508113	T2	20030304	JP 2001-519842	2000 0824
AU 766394	B2	20031016	AU 2000-68000	2000 0824
AT 286685	E	20050115	AT 2000-955871	2000 0824
PT 1207808	T	20050331	PT 2000-955871	2000 0824
ES 2235932	T3	20050716	ES 2000-955871	2000 0824
US 2002137866	A1	20020926	US 2002-92172	2002 0306
US 6465593	B2	20021015		
PRIORITY APPLN. INFO.:			US 1999-152169P	P 1999 0902
			US 2000-645274	A3 2000 0824
			WO 2000-US23228	W 2000 0824
AB	Hydrophilic coatings for implants are disclosed. The coatings are hydrophobically bound to the implant, but are not covalently cross-linked or covalently anchored to the implant's surface. For example, a coating composition was prepared containing 2-phenylethyl methacrylate 29.32 parts, N-vinyl pyrrolidone 54.64 parts, and polyethylene glycol (400) monomethyl ether monomethacrylate 14.84 parts using Lucirin TPO as a polymerization initiator. The composition was capable of absorbing 88.7% water and had a refractive index of 1.360.			
IT	220735-44-4P (hydrophobically-bound, hydrophilic (meth)acrylic polymer coatings for surgical implants)			
RN	220735-44-4 HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, 2-phenylethyl ester, polymer with 2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol,			

1,4-butanediyl di-2-propenoate and 2-phenylethyl 2-propenoate
(9CI) (CA INDEX NAME)

CM 1

CRN 98809-58-6

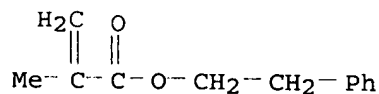
CMF C17 H17 N3 O



CM 2

CRN 3683-12-3

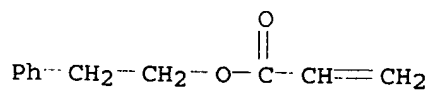
CMF C12 H14 O2



CM 3

CRN 3530-36-7

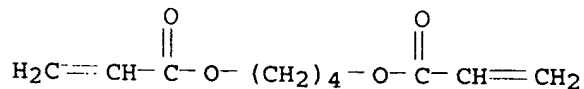
CMF C11 H12 O2



CM 4

CRN 1070-70-8

CMF C10 H14 O4



IC ICM A61F002-00
ICS C09D139-06; C09D139-06; C09D133-06
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 35
IT 98809-58-6

(UV absorber; hydrophobically-bound,
hydrophilic (meth)acrylic polymer coatings for surgical
implants)

IT 220735-44-4P

(hydrophobically-bound, hydrophilic (meth)acrylic polymer
coatings for surgical implants)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L38 ANSWER 14 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:100945 HCAPLUS

DOCUMENT NUMBER: 134:168064

TITLE: Sunblocking polymers and their novel
formulations

PATENT ASSIGNEE(S): Biophysica, Inc., USA

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001008647	A1	20010208	WO 1999-US17350	1999 0729

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W: AU, JP

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,
MC, NL, PT, SE

AU 9952473	A1	20010219	AU 1999-52473	1999 0729
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EP 1198220	A1	20020424	EP 1999-937690	1999 0729
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, FI, CY

PRIORITY APPLN. INFO.:	WO 1999-US17350	A	1999 0729
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OTHER SOURCE(S): MARPAT 134:168064

AB Novel polymeric biol. inert **compns.** and their
intermediates, as well as sunscreen formulations comprising them
and making them invisible, are provided for broad range protection
from UV radiation. Acrylic polymers comprising at least two
different **UV absorbing** moieties having
different light absorbing ranges are employed in conjunction with
other monomers to provide sunscreen polymers as microparticles.
The polymer microparticles, once imbibed with carrier compds.,
change the refractive index, thus providing invisible sunscreen
formulations which offer enhanced protection without adverse
physiol. effects. Polymerization was carried out using 30.83 g UV-A
monomer 4-methacryloxydibenzoyl methane, 29.04 g UV-B monomer

N-[2-(4'-dimethylaminobenzoyl)oxypropyl] methacrylamide, 31.13 g
 UV-C monomer 4-methoxy-N-[1-(4-methacryloxyphenyl)] benzamide,
 9.76 g 2-hydroxyethyl methacrylate, 1.73 g N,N-methylene
 bisacrylamide, and 500 mL methanol. After flushing with argon,
 0.951 g of 2,2'-azobis butyronitrile was added along with 250 mL
 of MeOH. After stirring at 60° for 20 h, the sunscreen
 polymer was filtered, washed with methanol, and vacuum dried to a
 mass of 90.66 g. The sunscreen polymer was formulated into a
 cream by mixing 1.38 g lanolin, 300 mg vitamin E acetate, 1.476 g
 copra oil, 180 mg Dow Corning 2503 and 180 mg white petrolatum
 together with 2.4 g of the polymer prepared and 120 mg titanium
 dioxide. When applied to the skin, the cream film takes a
 grayish-white color which becomes transparent over about 15-20
 min. Since the particles are in the range of 1 μ in size,
 transfer into the skin and underlying strata is prevented.

IT 295782-60-4P 324747-89-9P 324747-90-2P

(preparation and formulation of sunscreen acrylic polymers)

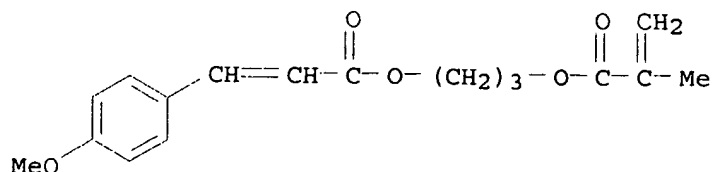
RN 295782-60-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl
 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and
 3-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]propyl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 295782-59-1

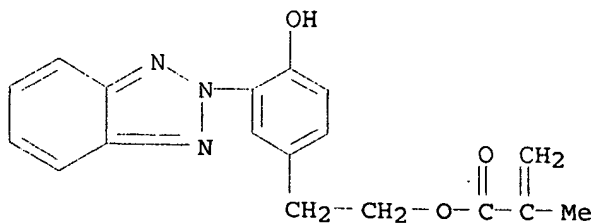
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CM 2

CRN 96478-09-0

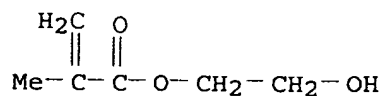
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CM 3

CRN 868-77-9

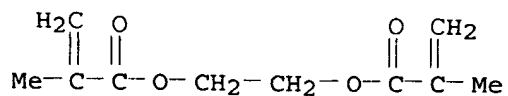
CMF C6 H10 O3



CM 4

CRN 97-90-5

CMF C10 H14 O4



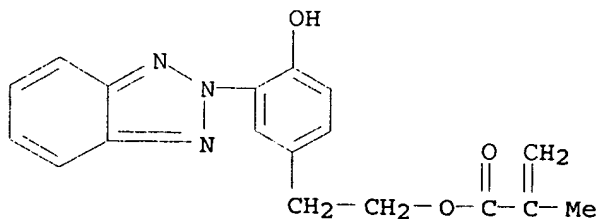
RN 324747-89-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl
 2-methyl-2-propenoate and 2-hydroxyethyl 2-methyl-2-propenoate
 (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

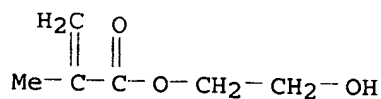
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CM 2

CRN 868-77-9

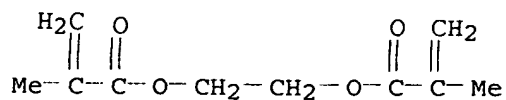
CMF C6 H10 O3



CM 3

CRN 97-90-5

CMF C10 H14 O4



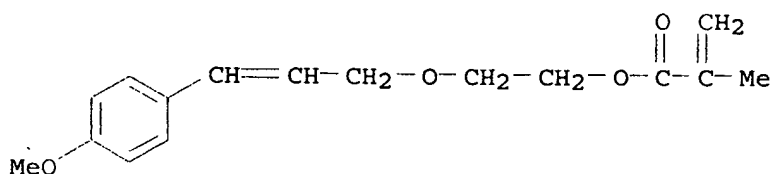
RN 324747-90-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl
 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and
 2-[[3-(4-methoxyphenyl)-2-propenyl]oxy]ethyl 2-methyl-2-propenoate
 (9CI) (CA INDEX NAME)

CM 1

CRN 295782-55-7

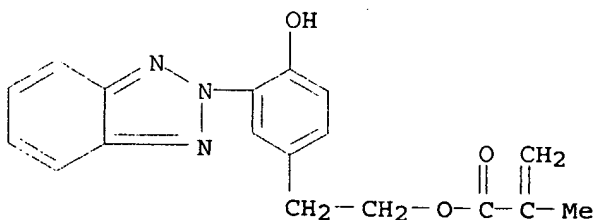
CMF C16 H20 O4



CM 2

CRN 96478-09-0

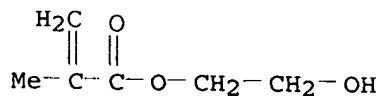
CMF C18 H17 N3 O3



CM 3

CRN 868-77-9

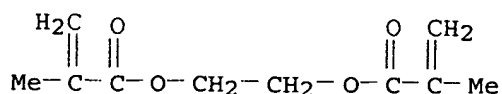
CMF C6 H10 O3



CM 4

CRN 97-90-5

CMF C10 H14 O4



IC ICM A61K007-42
 CC 62-4 (Essential Oils and Cosmetics)
 Section cross-reference(s): 35
 IT 79-10-7DP, Acrylic acid, esters, polymers 157174-87-3P
 295782-58-0P 295782-60-4P 324747-89-9P
 324747-90-2P 324747-92-4P 324747-93-5P
 (preparation and formulation of sunscreen acrylic polymers)
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L38 ANSWER 15 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:909241 HCAPLUS
 DOCUMENT NUMBER: 134:72357
 TITLE: Benzotriazole **UV absorbers**
 having enhanced durability
 INVENTOR(S): Ravichandran, Ramanathan; Suhadolnik, Joseph;
 Wood, Mervin G.; Debellis, Anthony; Detlefsen,
 Robert E.; Iyengar, Revathi; Wolf, Jean-pierre
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corp., USA
 SOURCE: U.S., 29 pp., Cont.-in-part of U. S.
 5,977,219.
 CODEN: USXXAM
 DOCUMENT TYPE: **Patent**
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6166218	A	20001226	US 1999-234880	1999 0121
US 5977219	A	19991102	US 1997-961127	1997 1030
GB 2346369	A1	20000809	GB 2000-610	2000 0113
GB 2346369 IT 1317727	B2 B1	20020417 20030715	IT 2000-MI46	2000 0117
DE 10001832	A1	20000727	DE 2000-10001832	2000 0118
BE 1013234	A3	20011106	BE 2000-34	

				2000 0118
CA 2296246	AA	20000721	CA 2000-2296246	
				2000 0119
BR 2000000124	A	20000926	BR 2000-124	
				2000 0119
NL 1014139	A1	20000724	NL 2000-1014139	
				2000 0120
NL 1014139 JP 2000212170	C2 A2	20010515 20000802	JP 2000-11194	
				2000 0120
FR 2789388	A1	20000811	FR 2000-673	
				2000 0120
FR 2789388 CN 1265395	B1 A	20051118 20000906	CN 2000-101136	
				2000 0120
ES 2160086	A1	20011016	ES 2000-111	
				2000 0120
ES 2160086 US 6262151	B1 B1	20020616 20010717	US 2000-614527	
				2000 0712
US 2001007886	A1	20010712	US 2001-760089	
				2001 0111
US 2002065341	A1	20020530	US 2001-851453	
				2001 0507
US 2002099221	A1	20020725	US 2001-23257	
				2001 1218
US 6515051 PRIORITY APPLN. INFO.:	B2	20030204	US 1997-961127	A2 1997 1030
			US 1996-745146	A 1996 1107
			US 1999-234880	A

1999

0121

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US 2000-614527

A3

2000

0712

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US 2001-851453

A1

2001

0507

OTHER SOURCE(S): MARPAT 134:72357

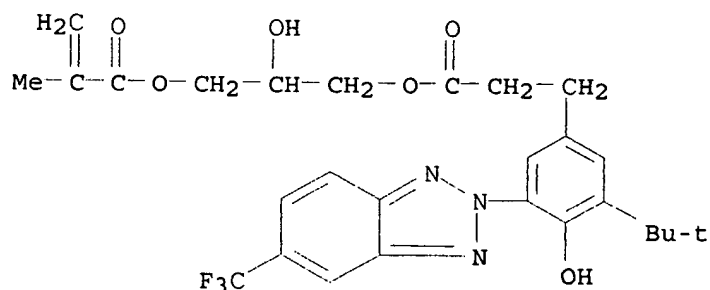
AB Benotriazole UV absorbers which are substituted at the 5-position of the benzo ring by an electron withdrawing group exhibit enhanced durability and very low loss rates when incorporated into automotive coatings. This is particularly the case when the 3-position of the Ph ring is also substituted by Ph or phenylalkyl such as α -cumyl. Compds. where the 5-position of the benzo ring are substituted by perfluoroalkyl such as trifluoromethyl are particularly of interest for both their enhanced durability and for their excellent solubility and excellent color properties in some thermoplastic compns. when the Ph ring is substituted at the 3-position by hydrogen or tert-alkyl.

IT 314274-59-4P 314274-60-7P

(benotriazole UV absorbers having enhanced durability)

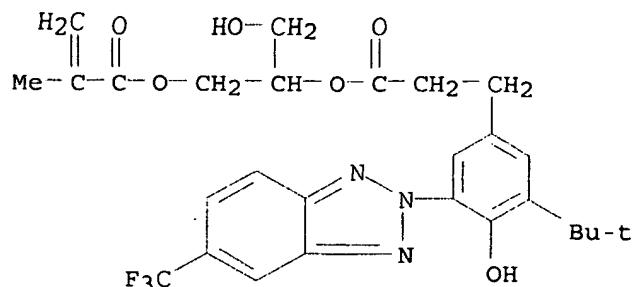
RN 314274-59-4 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(trifluoromethyl)-2H-benzotriazol-2-yl]-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



RN 314274-60-7 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(trifluoromethyl)-2H-benzotriazol-2-yl]-, 1-(hydroxymethyl)-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



IC ICM C07D249-20
ICS C07D403-10
INCL 548257000
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 28, 42
ST thermoplastic benzotriazole **UV absorber**;
automotive coating benzotriazole **UV absorber**
IT UV stabilizers
(benzotriazole **UV absorbers** having enhanced
durability)
IT Polycarbonates, properties
Polyoxymethylenes, properties
(benzotriazole **UV absorbers** having enhanced
durability)
IT Automobiles
(benzotriazole **UV absorbers** having enhanced
durability for automotive coatings)
IT Acrylic polymers, properties
(thermoset clear coat; benzotriazole **UV
absorbers** having enhanced durability)
IT Coating materials
(thermosetting, acrylic; benzotriazole **UV
absorbers** having enhanced durability)
IT 9002-86-2, PVC
(Geon 27; benzotriazole **UV absorbers** having
enhanced durability)
IT 24936-68-3, Makrolon 2608-1000, properties
(Lexan 145; benzotriazole **UV absorbers**
having enhanced durability)
IT 24968-12-5, Polybutylene terephthalate
(Valox 315-1001; benzotriazole **UV absorbers**
having enhanced durability)
IT 73936-91-1P, 2-(2-Hydroxy-3- α -cumyl-5-tert-octylphenyl)-2H-
benzotriazole 207738-63-4P 207738-64-5P 207738-93-0P
286471-11-2P 286471-12-3P 286471-14-5P 286471-15-6P
286471-17-8P 286471-18-9P 286471-19-0P 286471-20-3P
286471-21-4P 286471-25-8P 286471-26-9P 286471-27-0P
286471-28-1P 286471-29-2P 286471-30-5P 286471-31-6P
286471-32-7P 286471-33-8P 286471-34-9P 286471-36-1P
286471-37-2P 286476-92-4P 305322-07-0P 305322-08-1P
314274-39-0P 314274-40-3P 314274-41-4P 314274-42-5P
314274-43-6P 314274-44-7P 314274-45-8P 314274-46-9P
314274-47-0P 314274-48-1P 314274-49-2P 314274-50-5P
314274-51-6P 314274-52-7P 314274-53-8P 314274-56-1P
314274-57-2P 314274-58-3P 314274-59-4P
314274-60-7P
(benzotriazole **UV absorbers** having enhanced

- durability)
- IT 3987-92-6P, Methyl 4-amino-3-nitrobenzoate 23624-49-9DP, dialkyl
 derivs. 155436-75-2DP, dialkyl derivs. 158548-40-4DP, dialkyl
 derivs. 207738-65-6P 207738-66-7P 207738-67-8P
 207738-69-0P 207738-70-3P 207738-71-4P 207738-72-5P
 207738-91-8P 207738-92-9P 207738-95-2P 247933-51-3P
 261638-85-1P 261638-86-2P 286471-10-1P 305322-10-5P
 314274-25-4P 314274-26-5P 314274-27-6P 314274-28-7P
 (benzotriazole UV absorbers having enhanced
 durability)
- IT 9003-53-6, Polystyrene 25037-45-0, Bisphenol A-carbonic acid
 copolymer 26062-94-2, Polybutylene terephthalate 315194-51-5,
 Delrin 500P-NC010
 (benzotriazole UV absorbers having enhanced
 durability)
- IT 108-98-5, Thiophenol, reactions 400-98-6, 4-Amino-3-
 nitrobenzotrifluoride 1588-83-6, 4-Amino-3-nitrobenzoic acid
 3864-99-1, 5-Chloro-2-(2-hydroxy-3,5-di-tert-butylphenyl)-2H-
 benzotriazole 73936-80-8, 2- α -Cumyl-4-tert-octylphenol
 207738-68-9
 (benzotriazole UV absorbers having enhanced
 durability)

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L38 ANSWER 16 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:694315 HCAPLUS
 DOCUMENT NUMBER: 133:253960
 TITLE: UV-shielding benzotriazole-containing acrylic
 copolymers and their **compositions**
 with uniform dispersibility in aqueous
 solutions
 INVENTOR(S): Sasaki, Makoto; Ishii, Takafumi; Yuasa,
 Hitoshi
 PATENT ASSIGNEE(S): Nisseki Mitsubishi K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: **Patent**
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000273124	A2	20001003	JP 1999-85530	1999 0329
JP 2001026739	A2	20010130	JP 1999-199586	1999 0713
EP 1041094	A1	20001004	EP 2000-850057	2000 0329
EP 1041094	B1	20050608		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

MC, PT, IE, SI, LT, LV, FI, RO
 US 6368521 B1 20020409 US 2000-537644

2000

0329

PRIORITY APPLN. INFO.:

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 JP 1999-199586

A

1999

0713

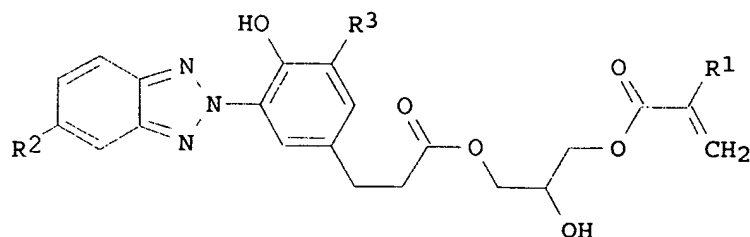
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 JP 1999-85530

A

1999

0329

GI



I

AB The copolymers, useful for coatings for glass, etc., are manufactured from monomer mixts. containing $\geq 50\%$ (meth)acrylates containing 1-90% (meth)acrylates I ($R_1 = H, Me$; $R_2 = \text{halo}, H$; $R_3 = H, C_1-5 \text{ alkyl}$). Thus, 2.5 μm -thick coating containing 83/17 I ($R_1 = Me, R_2 = Cl, R_3 = Et$)-Bu acrylate copolymer showed pencil hardness H, UV transmittance (390 nm) 2.3%, and good adhesion to a glass.

IT 253588-79-3DP, polymers with methacrylates and styrene

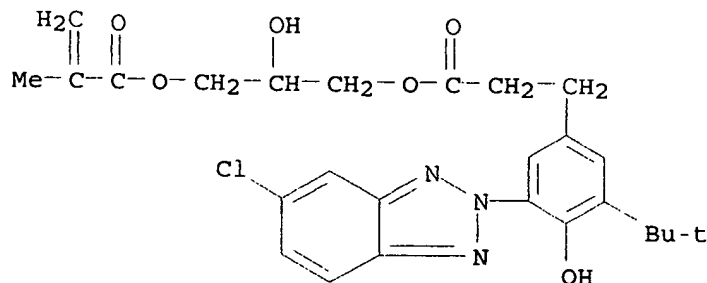
295777-86-5P 295777-87-6P 295777-88-7P

295777-89-8P 295777-90-1P 295777-91-2P

(UV-shielding benzotriazole-containing acrylic copolymers with uniform dispersibility in aqueous solns. for coatings)

RN 253588-79-3 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxylpropyl ester (9CI) (CA INDEX NAME)



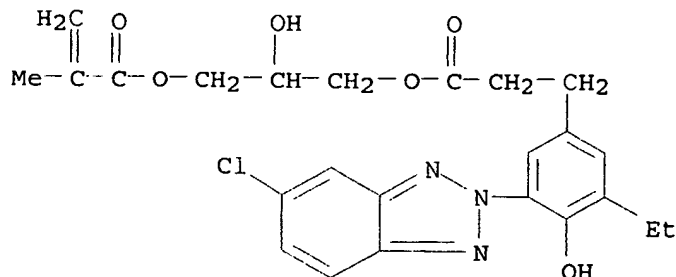
RN 295777-86-5 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-ethyl-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxylpropyl ester, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 295777-85-4

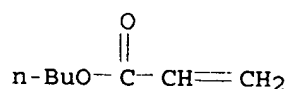
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CM 2

CRN 141-32-2

CMF C7 H12 O2



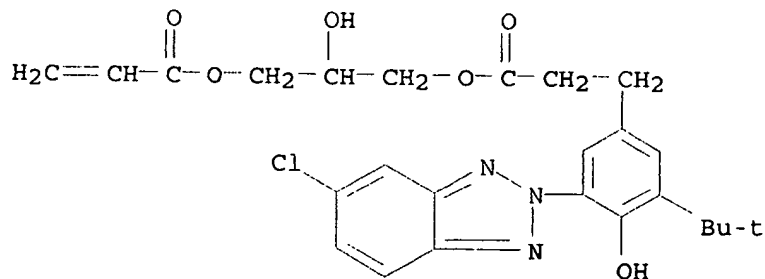
RN 295777-87-6 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl ester, polymer with methyl 2-methyl-2-propenoate, 2-methyl-2-propenoic acid and N,N,2-trimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 253588-78-2

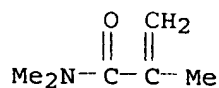
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CM 2

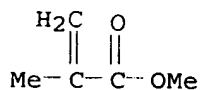
CRN 6976-91-6

CMF C6 H11 N O



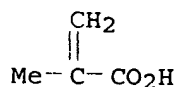
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

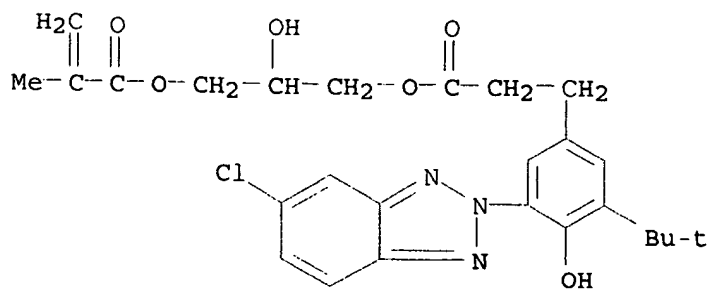
CRN 79-41-4
CMF C4 H6 O2



RN	295777-88-7	HCAPLUS
CN	Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxyl]propyl ester, polymer with cyclohexyl 2-propenoate, 2-ethylhexyl 2-methyl-2-propenoate, 2-(2-hydroxyethoxy)ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and phenylmethyl 2-propenoate (9CI) (CA INDEX NAME)	

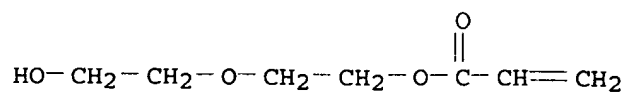
CM 1

CRN 253588-79-3
CMF C26 H30 Cl N3 O6



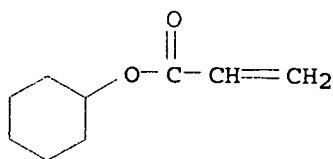
CM 2

CRN 13533-05-6
CMF C7 H12 O4



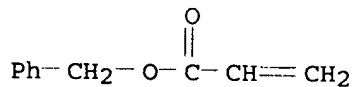
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CRN 3066-71-5
CMF C9 H14 O2



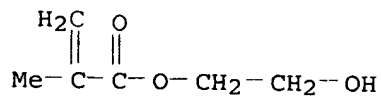
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CRN 2495-35-4
CMF C10 H10 O2



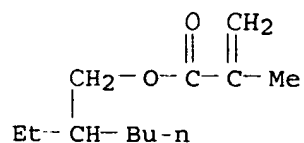
CM 5

CRN 868-77-9
CMF C6 H10 O3



CM 6

CRN 688-84-6
CMF C12 H22 O2



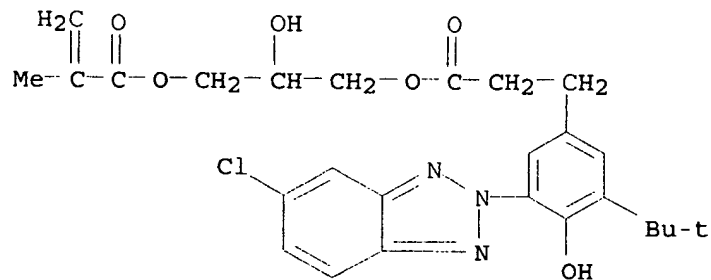
RN 295777-89-8 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI)
(CA INDEX NAME)

CM 1

CRN 253588-79-3

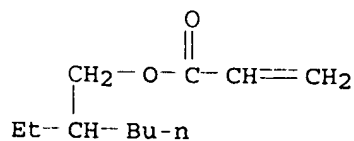
CMF C26 H30 Cl N3 O6



CM 2

CRN 103-11-7

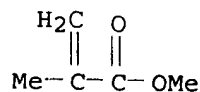
CMF C11 H20 O2



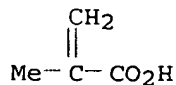
CM 3

CRN 80-62-6

CMF C5 H8 O2



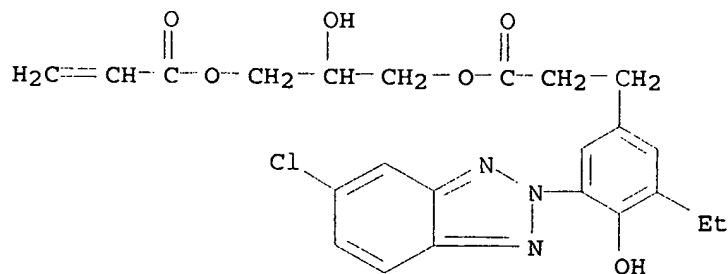
CM 4

CRN 79-41-4
CMF C4 H6 O2

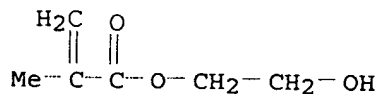
RN 295777-90-1 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-ethyl-4-hydroxy-, 2-hydroxy-3-[(1-oxo-2-propenyl)oxylpropyl ester, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

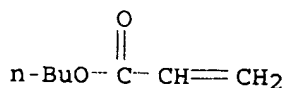
CM 1

CRN 253588-80-6
CMF C23 H24 Cl N3 O6

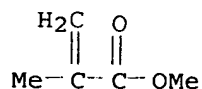
CM 2

CRN 868-77-9
CMF C6 H10 O3

CM 3

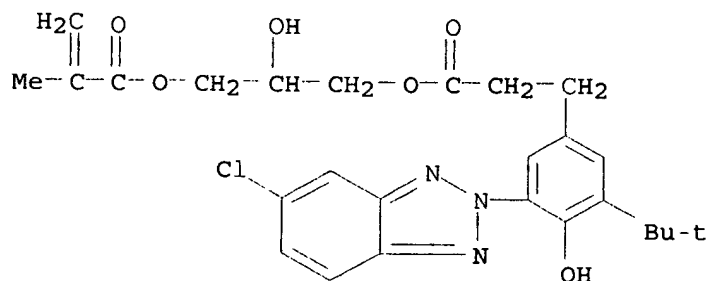
CRN 141-32-2
CMF C7 H12 O2

CRN 80-62-6
CMF C5 H8 O2

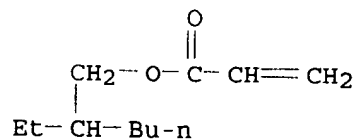


CM 1

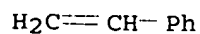
CRN 253588-79-3
CMF C26 H30 Cl N3 O6



CRN 103-11-7
CMF C11 H20 O2

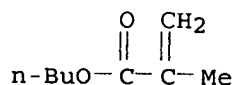


CRN 100-42-5
CMF C8 H8



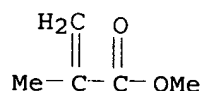
CM 4

CRN 97-88-1
CMF C8 H14 O2



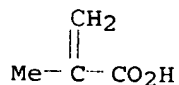
CM 5

CRN 80-62-6
CMF C5 H8 O2



CM 6

CRN 79-41-4
CMF C4 H6 O2



- IC ICM C08F220-36
ICS C09D133-14
CC 42-7 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35, 57
IT Coating materials
(UV-absorbing; UV-shielding
benzotriazole-containing acrylic copolymers with uniform
dispersibility in aqueous solns. for coatings)
IT 80-62-6DP, Methyl methacrylate, polymers with benzotriazole-containing
methacrylates and styrene 100-42-5DP, Styrene, polymers with
benzotriazole-containing methacrylates 868-77-9DP, 2-Hydroxyethyl
methacrylate, polymers with benzotriazole-containing methacrylates and
styrene 253588-79-3DP, polymers with methacrylates and
styrene 295777-86-5P 295777-87-6P
295777-88-7P 295777-89-8P 295777-90-1P
295777-91-2P
(UV-shielding benzotriazole-containing acrylic copolymers with
uniform dispersibility in aqueous solns. for coatings)

L38 ANSWER 17 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:680345 HCAPLUS
DOCUMENT NUMBER: 133:256572
TITLE: Sunblocking polymers and their novel

formulations
 INVENTOR(S): Sovak, Milos; Terry, Ronald C.; Douglass,
 James G., III; Bakir, Farid; Brown, Jason;
 Cugley, Peter
 PATENT ASSIGNEE(S): Biophysica, Inc., USA
 SOURCE: U.S., 10 pp., Cont.-in-part of U.S. Ser. No.
 46,945, abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6123928	A	20000926	US 1998-119836	1998 0721
US 5487885	A	19960130	US 1993-164881	1993 1209
US 5741924	A	19980421	US 1995-490316	1995 0614
PRIORITY APPLN. INFO.:			US 1992-994426	B2 1992 1221
			US 1993-164881	A2 1993 1209
			US 1995-490316	A2 1995 0614
			US 1998-46945	B2 1998 0323

OTHER SOURCE(S): MARPAT 133:256572

AB Novel polymeric biol. inert **compns.** and their intermediates, as well as sunscreen formulations comprising them and making them invisible, are provided for broad range protection from UV radiation. Acrylic polymers comprising at least two different **UV absorbing** moieties having different light absorbing ranges are employed in conjunction with other monomers to provide sunscreen polymers as microparticles. The polymer microparticles, once imbibed with carrier compds., change the refractive index, thus providing invisible sunscreen formulations which offer enhanced protection without adverse physiol. effects. A 1 L flask was charged with 30.83 g 4-methacryloxydibenzoyl methane, 29.04 g N-[2-(4'-dimethylaminobenzoyl)oxypropyl] methacrylamide, 31.13 g 4-methoxy-N-[1-(4-methacryloxyphenyl)] benzamide, 9.76 g 2-hydroxyethylmethacrylate, 1.73 g N,N-methylene bisacrylamide,

and 500 mL methanol. After flushing with argon, 0.951 g of 2,2'-azobisbutyronitrile was added along with 250 mL of MeOH. After stirring at 60° for 20 h the sunscreen polymer was filtered, washed with methanol, and vacuum dried to a mass of 90.66 g. Into a ball-grinder 1.38 g of lanolin, 300 mg of vitamin E acetate, 1.476 g of copra oil, 180 mg of silicone wax (Dow Corning 2503) and 180 mg of white petrolatum were added together with 2.4 g of the above polymer and 120 mg of titanium dioxide and were mixed at room temperature for 90 min to produce a sunscreen cream.

IT 295782-60-4P 295782-61-5P 295782-62-6P
(sunblocking polymers and their novel formulations)

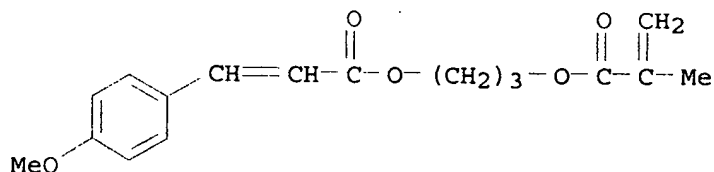
RN 295782-60-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl
2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and
3-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]propyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 295782-59-1

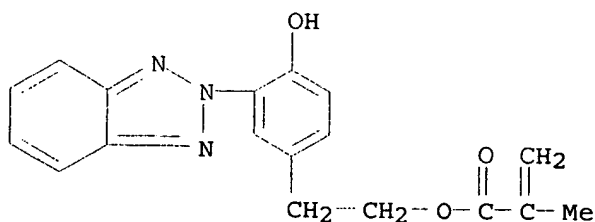
CMF C17 H20 O5



CM 2

CRN 96478-09-0

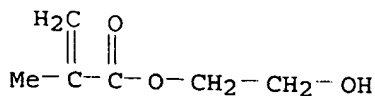
CMF C18 H17 N3 O3



CM 3

CRN 868-77-9

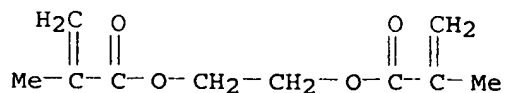
CMF C6 H10 O3



CM 4

CRN 97-90-5

CMF C10 H14 O4



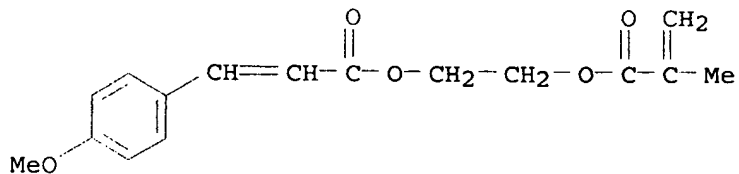
RN 295782-61-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl
 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and
 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 107162-92-5

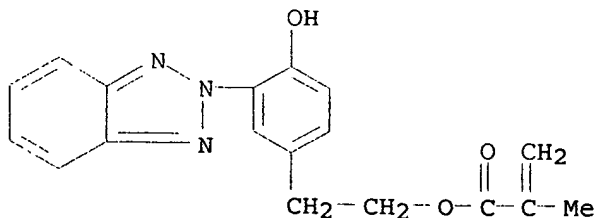
CMF C16 H18 O5



CM 2

CRN 96478-09-0

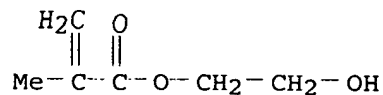
CMF C18 H17 N3 O3



CM 3

CRN 868-77-9

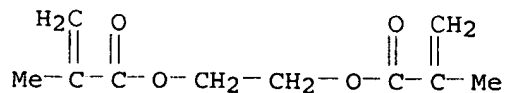
CMF C6 H10 O3



CM 4

CRN 97-90-5

CMF C10 H14 O4



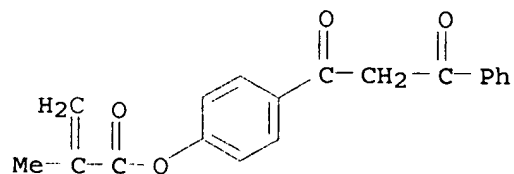
RN 295782-62-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 4-(1,3-dioxo-3-phenylpropyl)phenyl 2-methyl-2-propenoate and 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 157174-85-1

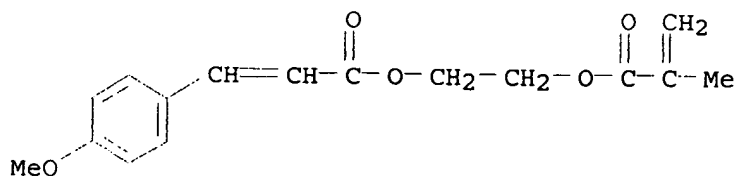
CMF C19 H16 O4



CM 2

CRN 107162-92-5

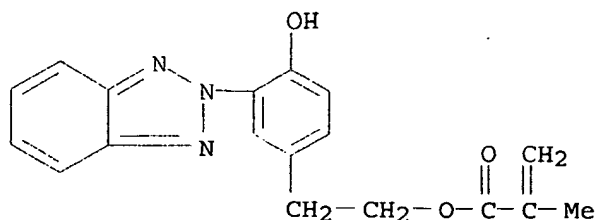
CMF C16 H18 O5



CM 3

CRN 96478-09-0

CMF C18 H17 N3 O3



IC ICM A61K007-42
 ICS A61K007-44; A61K007-00; A61K031-78
 INCL 424059000
 CC 62-4 (Essential Oils and Cosmetics)
 Section cross-reference(s): 35, 38
 IT 185811-85-2P 295782-54-6P 295782-57-9P 295782-58-0P
 295782-60-4P 295782-61-5P 295782-62-6P

(sunblocking polymers and their novel formulations)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L38 ANSWER 18 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:457143 HCAPLUS

DOCUMENT NUMBER: 133:90222

TITLE: Polymeric stabilizers having low
 polydispersity

INVENTOR(S): Steinmann, Alfred; Roth, Michael; Stauffer,
 Werner; Nesvadba, Peter; Muhlebach, Andreas

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039209	A1	20000706	WO 1999-EP9878	1999 1214

1999
1214

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN,
 CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM,
 HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
 LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
 TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
 MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
 SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN,
 TD, TG

CA 2353908 AA 20000706 CA 1999-2353908

1999
1214

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EP 1144496 A1 20011017 EP 1999-962256
1999
1214

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EP 1144496 B1 20040317
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT, IE, SI, LT, LV, FI, RO
JP 2002533548 T2 20021008 JP 2000-591114

1999
1214

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AT 262005 E 20040415 AT 1999-962256

1999
1214

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ES 2216610 T3 20041016 ES 1999-962256

1999
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US 6583245 B1 20030624 US 2001-868762

2001
0621

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PRIORITY APPLN. INFO.: EP 1998-811259 A

1998
1223

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WO 1999-EP9878 W

1999
1214

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AB The present invention relates to an a polymerizable compn
., comprising (a) at least one compound (RG)-A-(Stab), wherein
(Stab) is a light stabilizer radical selected from the group
consisting of sterically hindered amines, hydroxyphenyl-s-
triazines, hydroxyphenyl-benzotriazols and o-hydroxy-benzophenones;
A is a spacer group or a direct bond; and (RG) is a group containing
at least one ethylenically unsatd. functional group; and either
(b1) a compound Y-X, wherein X is a group having ≥ 1 carbon
atom and is such that the free radical derived from X is capable
of initiating polymerization and Y represents a group being such that the
free radical Y<<bul derived from it forms a stable free radical;
or (b2) a stable free radical Y<<bul and a free radical source
from which a radical is formed capable of initiating polymerization; or
(b3) a compound [In]p[Hal]q and a catalytically effective amount of an
oxidizable transition metal complex catalyst, wherein p represents
a number greater than zero and defines the number of initiator
fragments; q represents a number greater than zero; [In] represents a
radically transferable atom or group capable of initiating polymerization
and [Hal] represents a leaving group; and optionally (c) one or
more ethylenically unsatd. monomers or oligomers different from
those of formula (I). The polymers are useful as heat or light
stabilizers.

IT 281225-04-5P

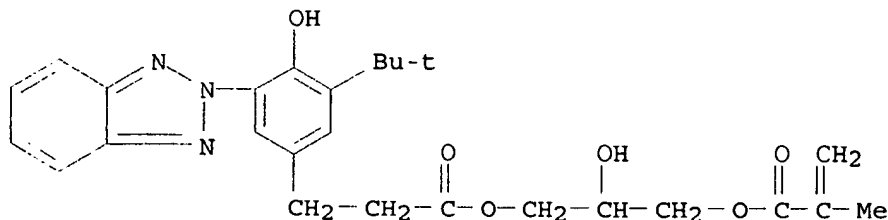
(stabilizer; polymeric stabilizers having low polydispersity)

RN 281225-04-5 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-
dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-
propenyl)oxy]propyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 135590-53-3
CMF C26 H31 N3 O6



IC ICM C08K005-34
ICS C08K005-07
CC 37-6 (Plastics Manufacture and Processing)
IT 27028-34-8P, Poly(4,6-bis(2,4-dimethylphenyl)-2(2-hydroxy-4-acryloxyphenyl)-triazine) 31229-19-3P, Poly(4-acryloyloxy-2-hydroxybenzophenone) 70195-66-3P 70195-78-7P, Poly(4-methacryloyloxy-1,2,2,6,6-pentamethylpiperidine) 70195-81-2P, Poly(4-acryloyloxy-1,2,2,6,6-pentamethylpiperidine) 73576-06-4P, 4-Acryloyloxy-1,2,2,6,6-pentamethylpiperidine-n-butyl acrylate copolymer 96478-13-6P, NORBLOC 7966 homopolymer 153175-43-0P, Methyl methacrylate-NORBLOC 7966 copolymer 281224-97-3P 281224-98-4P 281224-99-5P, 4-Acryloyloxy-1,2,2,6,6-pentamethylpiperidine-2-hydroxyethylacrylate block copolymer 281225-00-1P 281225-01-2P, 4-Acryloyloxy-1,2,2,6,6-pentamethylpiperidine-styrene block copolymer 281225-02-3P, 4-Acryloyloxy-1,2,2,6,6-pentamethylpiperidine-butyl acrylate block copolymer 281225-03-4P, 4-Acryloyloxy-1,2,2,6,6-pentamethylpiperidine-methyl methacrylate block copolymer 281225-04-5P

(stabilizer; polymeric stabilizers having low polydispersity)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 19 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:344292 HCAPLUS
DOCUMENT NUMBER: 132:348682
TITLE: UV-resistant, white laminated plastic film
INVENTOR(S): Tanaka, Yoshio; Mitsumura, Takashi
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000141552	A2	20000523	JP 1998-325261	1998 1116

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PRIORITY APPLN. INFO.:

JP 1998-325261

1998

1116

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AB Title film comprises a white base film which is laminated at least on its one side with **UV-absorbing** layers.
 Thus, poly(ethylene terephthalate) (PET) containing 5% TiO₂, PET containing 10% BaSO₄, and PET containing 5% TiO₂ were coextruded at ratio 5:90:5, biaxially oriented, set at 230°, and cast to give a 100-μm thick composite film, which was coated on 1 side with a **composition** comprising 30:70 2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole (I)-Me methacrylate copolymer 95, Nikkacoat FS 12 (modified saturated polyester resin) 4, Cymel 370 (methylolated melamine resin) 1, and 1:1 PhMe-MEK mixture 400 parts. It was top-coated with a **composition** comprising I 20, dipentaerythritol hexaacrylate 68, Aronix M 7100 (acrylic oligomer) 8, 2-hydroxypropyl acrylate 4, Irgacure 183 (light-polymerization initiator) 4, and a 1:1 PhMe-MEK mixture 312 parts then exposed to UV to give test pieces having whiteness 98 and 96%, tensile strength 130 and 104 MPa, and elongation 102 and 85%, resp., initially and after accelerated weathering test, resp.

IT 223916-99-2P 223917-04-2P
 (UV-absorbing topcoat; white, laminated plastic films with UV-absorbing coating layers)

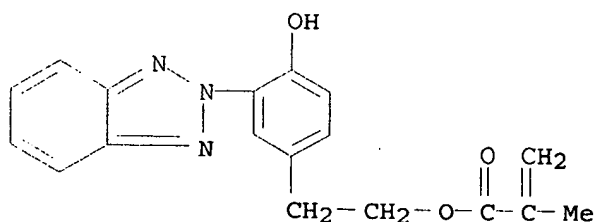
RN 223916-99-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with Aronix M 7100, 2-hydroxypropyl 2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

CMF C18 H17 N3 O3



CM 2

CRN 76723-57-4

CMF Unspecified

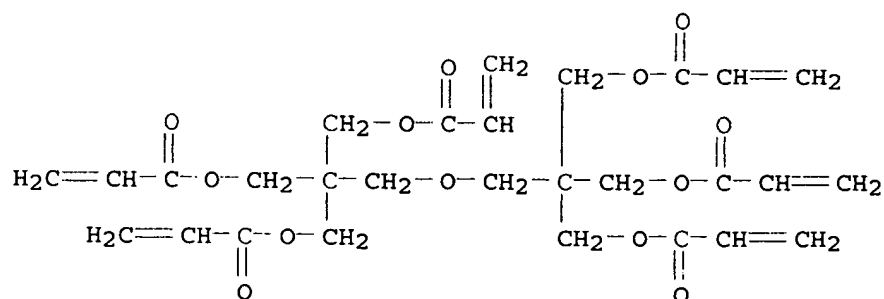
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 29570-58-9

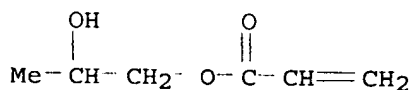
CMF C28 H34 O13



CM 4

CRN 999-61-1

CMF C6 H10 O3



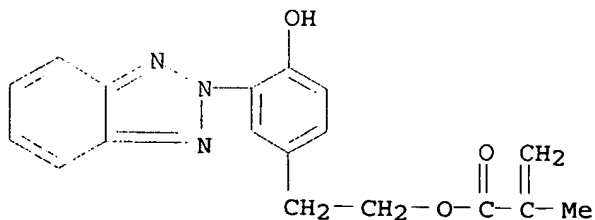
RN 223917-04-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with Aronix M 7100, 2-hydroxypropyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

CMF C18 H17 N3 O3



CM 2

CRN 76723-57-4

CMF Unspecified

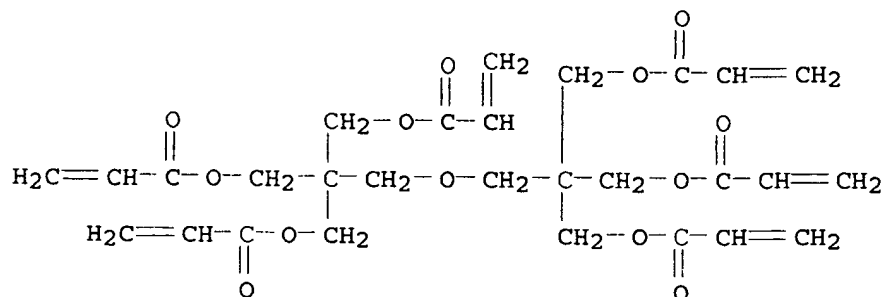
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 29570-58-9

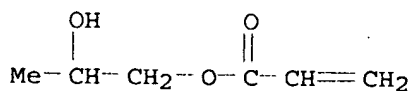
CMF C28 H34 O13



CM 4

CRN 999-61-1

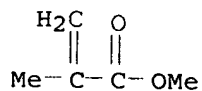
CMF C6 H10 O3



CM 5

CRN 80-62-6

CMF C5 H8 O2



IC ICM B32B027-18

ICS B29C047-06; C09K003-00; B29C055-12; B29L009-00

CC 38-3 (Plastics Fabrication and Uses)

ST UV resistant white laminated plastic film; polyethylene terephthalate based laminated white film; PET titania filler laminated white film; barium sulfate filler PET laminated white film; weather resistance **UV absorbing** coating film; coating **UV absorber** benzotriazole acrylic copolymer

IT Coating materials
(**UV-absorbing**; white, laminated plastic
films with **UV-absorbing** coating layers)

IT Polyesters, uses
(acrylic, with benzotriazole group, UV-

- absorbing undercoat; white, laminated plastic films with **UV-absorbing** coating layers)
- IT Polyoxyalkylenes, uses
(base PET layer containing; white, laminated plastic films with **UV-absorbing** coating layers)
- IT Polyesters, uses
(base films, containing white pigments; white, laminated plastic films with **UV-absorbing** coating layers)
- IT Coating materials
(weather-resistant; white, laminated plastic films with **UV-absorbing** coating layers)
- IT Laminated plastic films
(white, laminated plastic films with **UV-absorbing** coating layers)
- IT 159484-58-9P, Acrylic acid-butyl acrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-methyl methacrylate copolymer
(**UV-absorbing** coating; white, laminated plastic films with **UV-absorbing** coating layers)
- IT 223916-99-2P 223917-04-2P
(**UV-absorbing** topcoat; white, laminated plastic films with **UV-absorbing** coating layers)
- IT 268734-26-5P
(**UV-absorbing** undercoat; white, laminated plastic films with **UV-absorbing** coating layers)
- IT 9016-80-2, Polymethylpentene 25322-68-3
(base PET layer containing; white, laminated plastic films with **UV-absorbing** coating layers)
- IT 25038-59-9, Poly(ethylene terephthalate), uses
(base films, containing white pigments; white, laminated plastic films with **UV-absorbing** coating layers)
- IT 7727-43-7, Barium sulfate 13463-67-7, Titania, uses
(pigments, in PET base layer; white, laminated plastic films with **UV-absorbing** coating layers)
- IT 220463-40-1P, Aronix M 7100-dipentaerythritol hexaacrylate-2-hydroxypropyl acrylate copolymer
(topcoat; white, laminated plastic films with **UV-absorbing** coating layers)
- IT 268746-97-0, Kayanova POP 062
(topcoat; white, laminated plastic films with **UV-absorbing** coating layers)

L38 ANSWER 20 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:277719 HCAPLUS

DOCUMENT NUMBER: 132:315620

TITLE: Electrochromic device

INVENTOR(S): Nishikitani, Yoshinori; Sugiura, Izuru;
Kobayashi, Masaaki; Imafuku, Hiroshi

PATENT ASSIGNEE(S): Nippon Mitsubishi Oil Corporation, Japan

SOURCE: Eur. Pat. Appl., 40 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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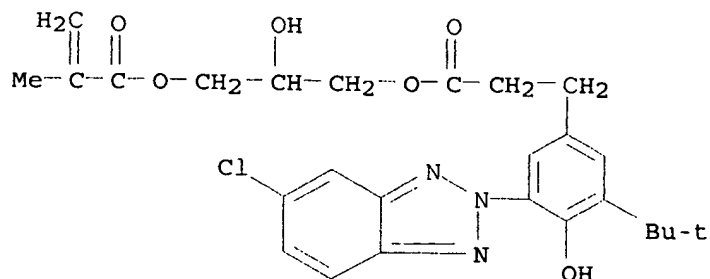
each H or C1-20 hydrocarbon or oxygen-containing hydrocarbon; R8 = H or C1-20 hydrocarbon or oxygen-containing hydrocarbon; Ar1 = C6-20 divalent aromatic hydrocarbon; R9 = H or C1-5 alkyl; R10 = C1-15 hydrocarbon or oxygen-containing hydrocarbon; c = 0 or 1; R11 and R12 = independently selected H or C1-20 hydrocarbon or oxygen-containing hydrocarbon; and R13 = H or C1-20 hydrocarbon or oxygen-containing hydrocarbon group); and a precursor component of a polymeric solid electrolyte, disposed between two elec. conductive substrates at least one of which is transparent. The ion conductive layer may addnl. incorporate an **UV-absorbing** compound having an ethylenic double bond.

IT 253588-79-3P

(electrochromic devices with cured ion conductive layers)

RN 253588-79-3 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



IC ICM C09K009-02

ICS G02F001-15

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 72, 74, 76

IT 71036-55-0P 99774-26-2P 163684-75-1P 232599-55-2P

253588-79-3P 265326-65-6P

(electrochromic devices with cured ion conductive layers)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 21 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:274666 HCAPLUS

DOCUMENT NUMBER: 132:294893

TITLE: Ultraviolet radiation-absorbing polyester fluorescent lamp covering films

INVENTOR(S): Mori, Hiroshi; Akada, Mitsuo

PATENT ASSIGNEE(S): Ohtsuka Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000123622

A2

20000428

JP 1998-291130

1998

1013

PRIORITY APPLN. INFO.:

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JP 1998-291130

1998

1013

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AB The title films are prepared from copolyesters containing 0.01-50 mol% bisbenzotriazol monomers (e.g., Ruva-100, Ruva-93), or from polyester compns. containing 1.0-20% the copolyesters.

IT 264284-61-9P

(UV-absorbing films; UV radiation-absorbing polyester fluorescent lamp covering films)

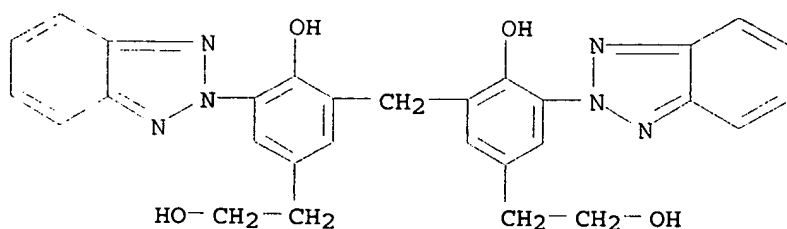
RN 264284-61-9 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with 1,2-ethanediol and 3,3'-methylenebis[5-(2H-benzotriazol-2-yl)-4-hydroxybenzeneethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 196516-61-7

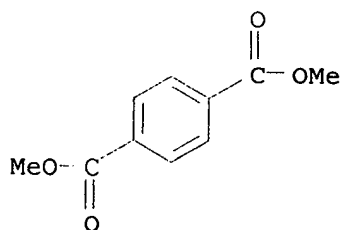
CMF C29 H26 N6 O4



CM 2

CRN 120-61-6

CMF C10 H10 O4



CM 3

CRN 107-21-1

CMF C2 H6 O2

HO-CH₂-CH₂-OH

IC ICM F21V009-06
ICS B32B027-18; C09K003-00
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 42, 74
ST **UV absorbing** polyester fluorescent lamp
covering film; bisbenzotriazol copolyester fluorescent lamp
covering film
IT Fluorescent lamps
UV stabilizers
(**UV radiation-absorbing** polyester
fluorescent lamp covering films)
IT Polyesters, uses
(**UV radiation-absorbing** polyester
fluorescent lamp covering films)
IT Laminated plastics, uses
(**UV radiation-absorbing** polyester
fluorescent lamp covering films)
IT Coating materials
(**UV-absorbing; UV radiation-**
absorbing polyester fluorescent lamp covering films)
IT Transparent materials
Transparent materials
(adhesives; **UV radiation-absorbing**
polyester fluorescent lamp covering films)
IT Adhesives
Adhesives
(transparent; **UV radiation-absorbing**
polyester fluorescent lamp covering films)
IT 264284-62-0P
(**UV-absorbing** coatings; **UV**
radiation-**absorbing** polyester fluorescent lamp
covering films)
IT 264284-61-9P
(**UV-absorbing** films; **UV**
radiation-**absorbing** polyester fluorescent lamp
covering films)

L38 ANSWER 22 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:260249 HCAPLUS
DOCUMENT NUMBER: 132:280628
TITLE: Bisbenzotriazolylphenol compounds, ultraviolet
absorbers, ultraviolet-absorbing polymer, and
resin **compositions** and coating
materials containing them
INVENTOR(S): Daimon, Emiko; Mori, Koji; Akada, Mitsuo
PATENT ASSIGNEE(S): Otsuka Chemical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
----- ----- WO 2000021937	----- ----- A1	----- ----- 20000420	----- ----- WO 1999-JP5525	

1999
1006

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W: US
 RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,
 MC, NL, PT, SE
 JP 2000119262 A2 20000425 JP 1998-291847

1998
1014

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JP 3024960 B2 20000327
 EP 1055669 A1 20001129 EP 1999-970384

1999
1006

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
 MC, PT, IE, FI
 US 6414100 B1 20020702 US 2000-581162

2000
0613

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PRIORITY APPLN. INFO.:

JP 1998-291847 A

1998
1014

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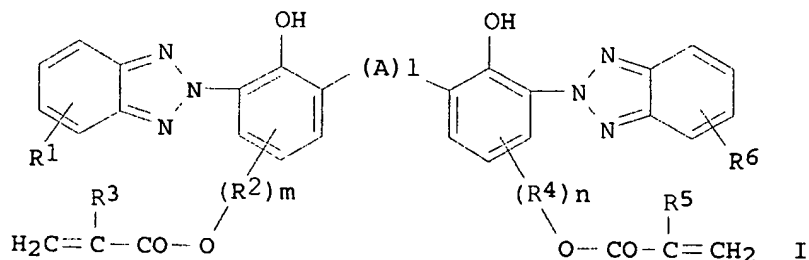
WO 1999-JP5525 W

1999
1006

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OTHER SOURCE(S):
GI

MARPAT 132:280628

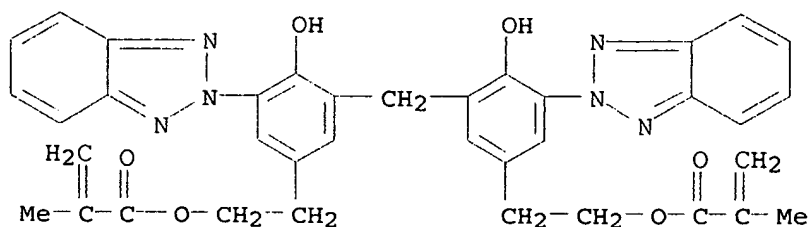


- AB Compds. I (A = CH₂, CMe₂, CEtMe; R₁, R₆ = H, C1-4 alkyl, aryl, C1-4 alkoxy, halo; R₂, R₄ = linear or branched C1-6 alkylene; R₃, R₅ = H, Me; l, m, n = 0, 1), useful for preparation of **UV-absorbing** coatings or as UV stabilizers, are prepared. Thus, a **composition** containing Art Resin UN 3320HA (urethane acrylate oligomer) 4.0, pentaerythritol triacrylate 3.0, dipentaerythritol hexaacrylate 3.0, 2,2'-methylenebis[6-(2H-benzotriazole-2-yl)-4-(2-methacryloyloxyethyl)phenol] 0.3, and Darocur 1173 0.3 g was applied on a polycarbonate substrate, and irradiated by UV to give coatings showing good weather resistance.
- IT 263909-72-4P 263909-74-6P 263909-76-8P
 263909-78-0P 263909-81-5P 263909-83-7P
 (bisbenzotriazolylphenol compds., **UV absorbers**, and **UV-absorbing** polymers for coatings)

RN 263909-72-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

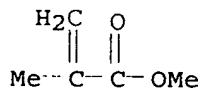
CM 1

CRN 263909-63-3
 CMF C37 H34 N6 O6



CM 2

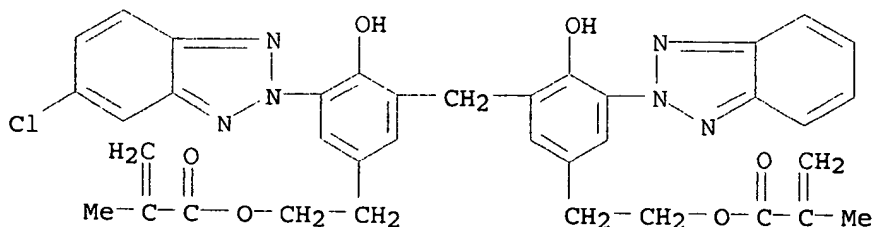
CRN 80-62-6
 CMF C5 H8 O2



RN 263909-74-6 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-5-[[3-(5-chloro-2H-benzotriazol-2-yl)-2-hydroxy-5-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]phenyl]methyl]-4-hydroxyphenyl]ethyl ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

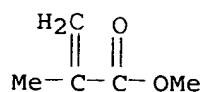
CM 1

CRN 263909-65-5
 CMF C37 H33 Cl N6 O6



CM 2

CRN 80-62-6
 CMF C5 H8 O2



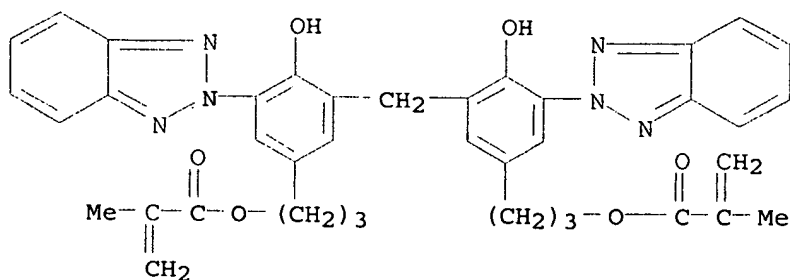
RN 263909-76-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-3,1-propanediyl] ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-67-7

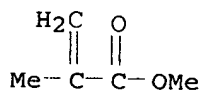
CMF C39 H38 N6 O6



CM 2

CRN 80-62-6

CMF C5 H8 O2



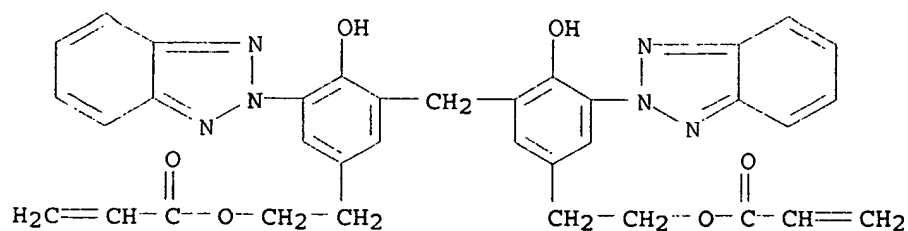
RN 263909-78-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-70-2

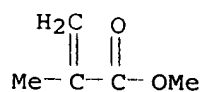
CMF C35 H30 N6 O6



CM 2

CRN 80-62-6

CMF C5 H8 O2



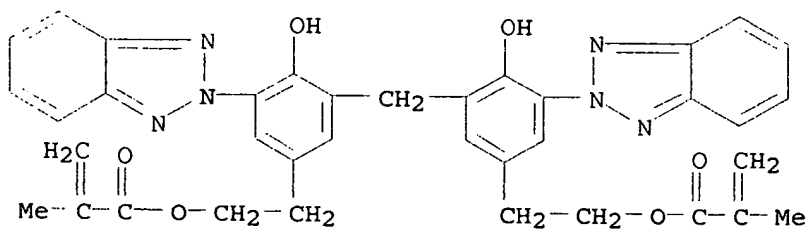
RN 263909-81-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester, polymer with Art Resin UN 3320HA, 2-(hydroxymethyl)-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-[[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-63-3

CMF C37 H34 N6 O6



CM 2

CRN 149531-40-8

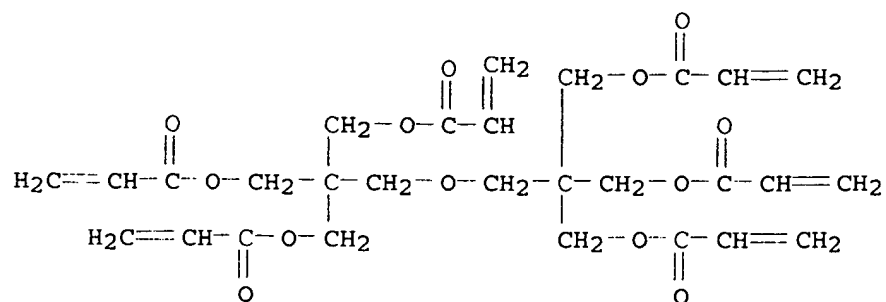
CMF Unspecified

CCI PMS, MAN

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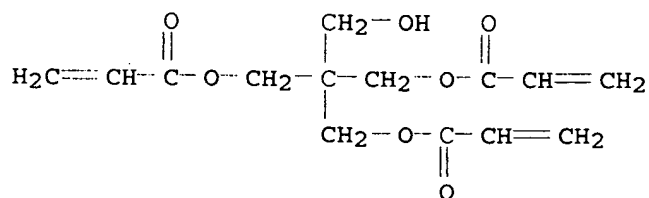
CM 3

CRN 29570-58-9
CMF C28 H34 O13



CM 4

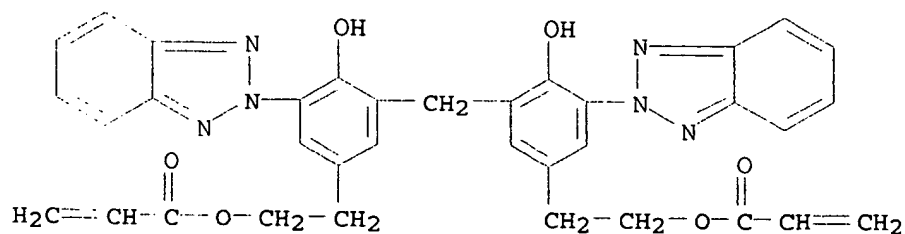
CRN 3524-68-3
CMF C14 H18 O7



RN 263909-83-7 HCAPLUS
CN 2-Propenoic acid, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester, polymer with Art Resin UN 3320HA, 2-(hydroxymethyl)-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-70-2
CMF C35 H30 N6 O6



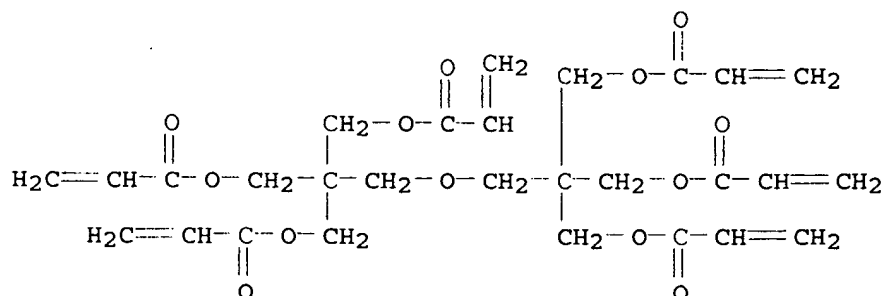
CM 2

CRN 149531-40-8
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

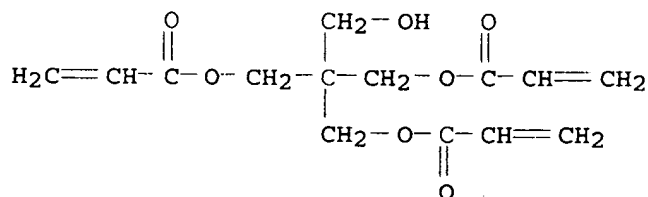
CM 3

CRN 29570-58-9
 CMF C28 H34 O13



CM 4

CRN 3524-68-3
 CMF C14 H18 O7

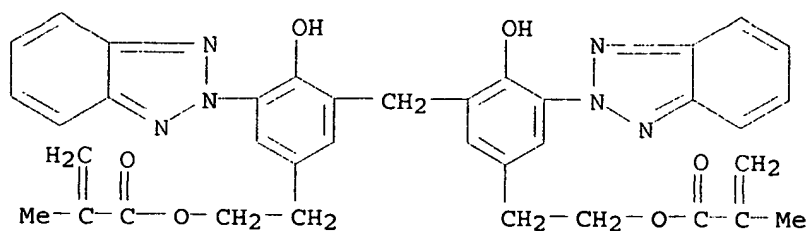


IT 263909-63-3P 263909-65-5P 263909-67-7P
 263909-70-2P

(bisbenzotriazolylphenol compds., UV
 absorbers, and UV-absorbing
 polymers for coatings)

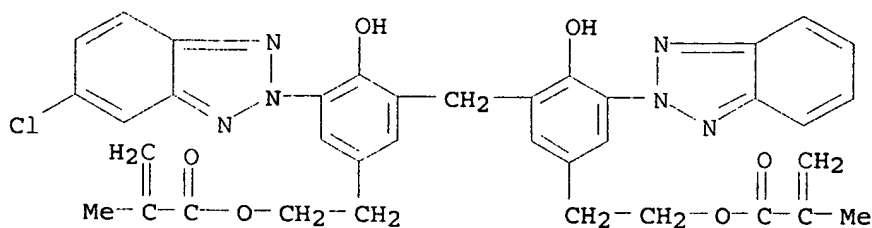
RN 263909-63-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA
 INDEX NAME)



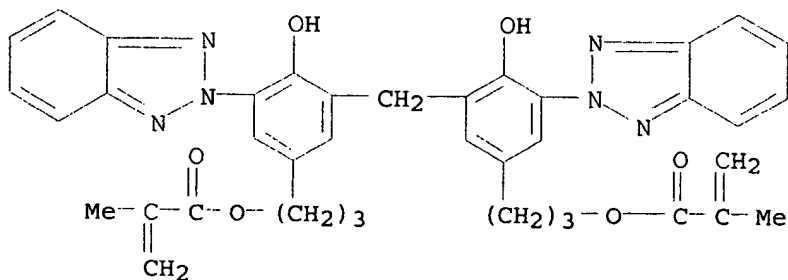
RN 263909-65-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-5-[[3-(5-chloro-2H-benzotriazol-2-yl)-2-hydroxy-5-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]phenyl]methyl]-4-hydroxyphenyl]ethyl ester (9CI) (CA INDEX NAME)



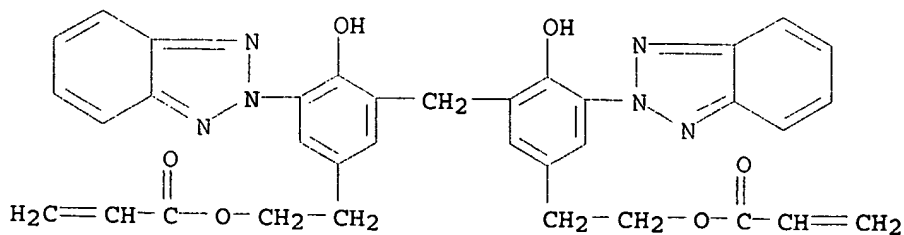
RN 263909-67-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-3,1-propanediyl] ester (9CI) (CA INDEX NAME)



RN 263909-70-2 HCAPLUS

CN 2-Propenoic acid, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)



IC ICM C07D249-20
ICS C09K003-00; C08K005-3475; C08F220-36; C08L033-14; C09D005-32
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 28, 37
ST benzotriazolyphenol methacrylate polymer **UV absorber**; weather resistance urethane acrylate polymer coating; polymerizable UV stabilizer benzotriazolyphenol methacrylate
IT Polyurethanes, uses
(acrylates, polymers; bisbenzotriazolyphenol compds., **UV absorbers**, and **UV-absorbing** polymers for coatings)
IT UV stabilizers
(bisbenzotriazolyphenol compds., **UV absorbers**, and **UV-absorbing** polymers for coatings)
IT Coating materials
(weather-resistant, UV-curable; bisbenzotriazolyphenol compds., **UV absorbers**, and **UV-absorbing** polymers for coatings)
IT 263909-72-4P 263909-74-6P 263909-76-8P
263909-78-0P 263909-81-5P 263909-83-7P
(bisbenzotriazolyphenol compds., **UV absorbers**, and **UV-absorbing** polymers for coatings)
IT 263909-48-4P 263909-53-1P 263909-56-4P 263909-60-0P
263909-63-3P 263909-65-5P 263909-67-7P
263909-70-2P
(bisbenzotriazolyphenol compds., **UV absorbers**, and **UV-absorbing** polymers for coatings)
IT 9011-14-7, PMMA
(bisbenzotriazolyphenol compds., **UV absorbers**, and **UV-absorbing** polymers for coatings)
IT 96478-09-0 96478-11-4 96549-96-1 170103-27-2
(bisbenzotriazolyphenol compds., **UV absorbers**, and **UV-absorbing** polymers for coatings)
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L38 ANSWER 23 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:252141 HCAPLUS
DOCUMENT NUMBER: 132:295248
TITLE: Light-resistant water-thinned ink
compositions
INVENTOR(S): Shida, Hiroki; Ito, Nobuyuki
PATENT ASSIGNEE(S): JSR Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000109739

A2

20000418

JP 1998-286963

1998

1008

PRIORITY APPLN. INFO.:

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JP 1998-286963

1998

1008

AB The ink **compns.** contain **UV-absorbing** polymers, pigments, and/or dyes. Thus, an aqueous dispersion containing copolymers of 2-(2-hydroxy-5-methacryloyloxyethylphenyl)-2H-benzotriazole (RUVA) 30, 1,2,2,6,6-pentamethyl-4-piperidyl methacrylate 1, methacrylic acid 30, and 2-ethylhexyl acrylate 39 parts (neutralized with dimethylethanolamine) was prepared, which (15 parts) was mixed with C.I. Pigment Yellow 17 20, isopropanol 5, and water 60 parts to give an ink showing good storage stability at 50° for 1 mo, and good resistance to UV irradiation for 100 h.

IT **264197-00-4P 264197-01-5P 264197-07-1P**
(light-resistant storage-stable water-thinned ink **compns.**)

RN 264197-00-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), 2-ethylhexyl 2-propenoate, ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, Latemul S 180A, methyl 2-methyl-2-propenoate and 1,2,2,6,6-pentamethyl-4-piperidiny 2-methyl-2-propenoate, compd. with 2,2'-iminobis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 111-42-2

CMF C4 H11 N O2

 $\text{HO}-\text{CH}_2-\text{CH}_2-\text{NH}-\text{CH}_2-\text{CH}_2-\text{OH}$

CM 2

CRN 264196-99-8

CMF (C18 H17 N3 O3 . C14 H25 N O2 . C11 H20 O2 . C10 H14 O4 . C6 H10 O3 . C5 H8 O2 . C5 H8 O2 . C4 H6 O2 . Unspecified)x

CCI PMS

CM 3

CRN 113255-53-1

CMF Unspecified

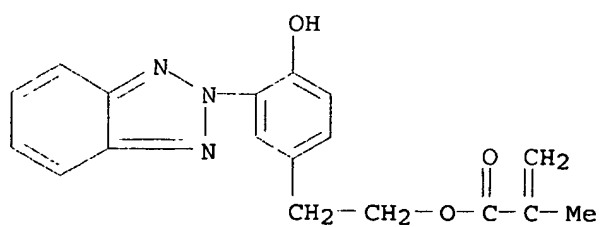
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 96478-09-0

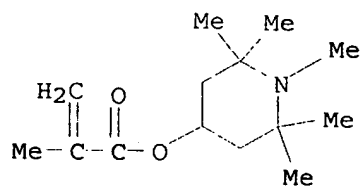
CMF C18 H17 N3 O3



CM 5

CRN 68548-08-3

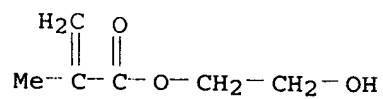
CMF C14 H25 N O2



CM 6

CRN 868-77-9

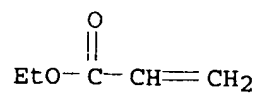
CMF C6 H10 O3



CM 7

CRN 140-88-5

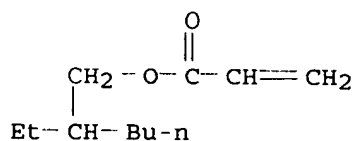
CMF C5 H8 O2



CM 8

CRN 103-11-7

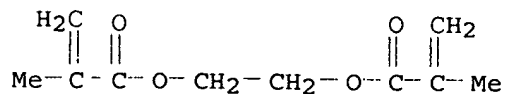
CMF C11 H20 O2



CM 9

CRN 97-90-5

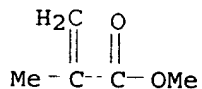
CMF C10 H14 O4



CM 10

CRN 80-62-6

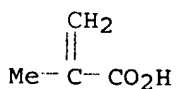
CMF C5 H8 O2



CM 11

CRN 79-41-4

CMF C4 H6 O2



RN 264197-01-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, butyl 2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide, ammonium salt (9CI) (CA INDEX NAME)

CM 1

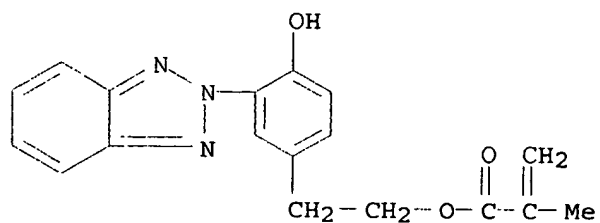
CRN 263244-70-8

CMF (C18 H17 N3 O3 . C11 H20 O2 . C10 H14 O4 . C8 H8 . C7 H12 O2 . C6 H10 O3 . C4 H7 N O2 . C4 H6 O2)x

CCI PMS

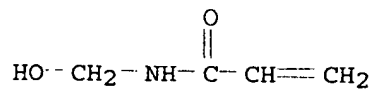
CM 2

CRN 96478-09-0
CMF C18 H17 N3 O3



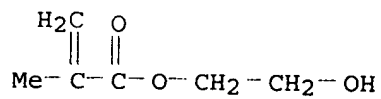
CM 3

CRN 924-42-5
CMF C4 H7 N O2



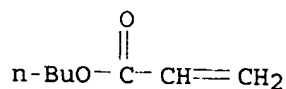
CM 4

CRN 868-77-9
CMF C6 H10 O3



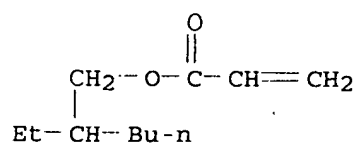
CM 5

CRN 141-32-2
CMF C7 H12 O2



CM 6

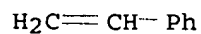
CRN 103-11-7
CMF C11 H20 O2



CM 7

CRN 100-42-5

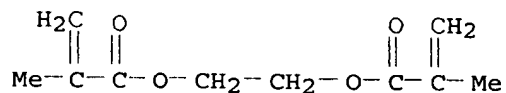
CMF C8 H8



CM 8

CRN 97-90-5

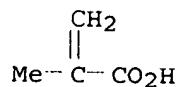
CMF C10 H14 O4



CM 9

CRN 79-41-4

CMF C4 H6 O2



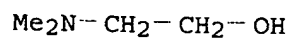
RN 264197-07-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0

CMF C4 H11 N O



CM 2

CRN 264197-06-0

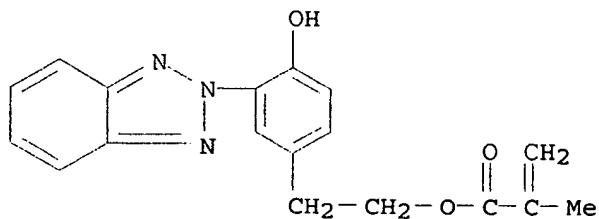
CMF (C18 H17 N3 O3 . C10 H14 O4 . C6 H10 O3 . C5 H8 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 3

CRN 96478-09-0

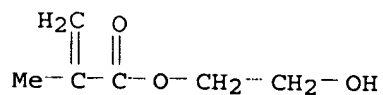
CMF C18 H17 N3 O3



CM 4

CRN 868-77-9

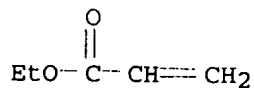
CMF C6 H10 O3



CM 5

CRN 140-88-5

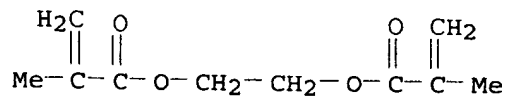
CMF C5 H8 O2



CM 6

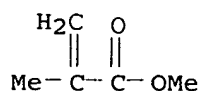
CRN 97-90-5

CMF C10 H14 O4



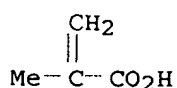
CM 7

CRN 80-62-6
CMF C5 H8 O2



CM 8

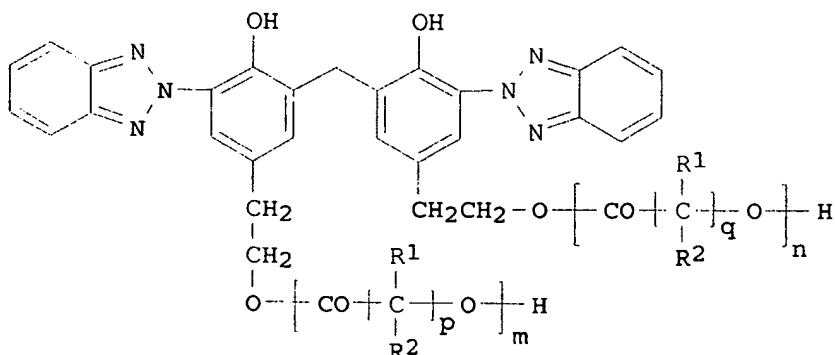
CRN 79-41-4
CMF C4 H6 O2



IC ICM C09D011-10
ICS C08L027-12; C08L033-08; C08L083-04; C08L083-10; C09C003-10
CC 42-12 (Coatings, Inks, and Related Products)
ST **UV absorbing** polymer ink; methacryloyl
benzotriazole methacrylic acid ethylhexyl acrylate copolymer;
storage stability water thinned ink
IT Light-resistant materials
Light-resistant materials
(inks; light-resistant storage-stable water-thinned ink
compns.)
IT Inks
Inks
(light-resistant; light-resistant storage-stable water-thinned
ink **compns.**)
IT Inks
(water-thinned; light-resistant storage-stable water-thinned
ink **compns.**)
IT 264196-98-7P 264197-00-4P 264197-01-5P
264197-03-7P 264197-05-9P 264197-07-1P 264197-08-2P
(light-resistant storage-stable water-thinned ink
compns.)

L38 ANSWER 24 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:249877 HCAPLUS
DOCUMENT NUMBER: 132:280580
TITLE: UV-shielding photocurable polymer
compositions, their use in coating
materials, and moldings covered with them
INVENTOR(S): Imai, Toshiyuki; Katayama, Shinichi; Mori,
Hiroshi; Akada, Mitsuo; Ishida, Koji
PATENT ASSIGNEE(S): Arakawa Chemical Industries, Ltd., Japan;
Ohtsuka Chemical Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000109652	A2	20000418	JP 1998-280383	1998 1001
PRIORITY APPLN. INFO.:			JP 1998-280383	1998 1001
GI				



AB The **compns.** comprise thermally cured products of photocurable **compns.** containing polymers having (meth)acrylic equivalent 100-300 g/equiv, OH value 20-500, and weight-average mol. weight 5000-50,000, polyisocyanates, and I (R₁, R₂ = H, C₁-10 alkyl; p, q = 4-8; m, n = 1-20). Thus, a mixture containing acrylic acid-glycidyl methacrylate-Me methacrylate copolymer (acrylic equivalent 270 g/equiv, OH value 204, Mw 18,000), I (R₁, R₂ = H; p, q = 5; prepared by polymerization of caprolactone in the presence of 2,2'-methylenebis[6-(2H-1,2,3-benzotriazole-2-yl)-4-(2-hydroxyethyl)phenol]), Coronate HX (1,6-hexane diisocyanate trimer), and a photopolymn. initiator was applied on an acrylic resin sheet, heated, and UV-cured to give a sheet with coatings showing high surface hardness and weather resistance.

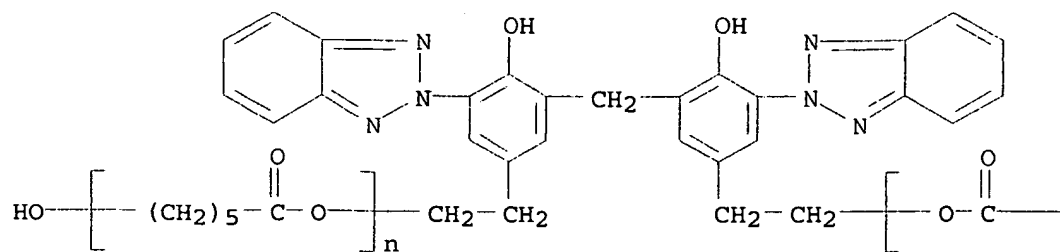
IT 214746-68-6P

(UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)

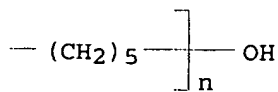
RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 263904-11-6P

(UV-shielding photocurable resin compns. for abrasion-, chemical, weather- and crack-resistant coatings)

RN 263904-11-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with Coronate HX, α, α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]] , oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

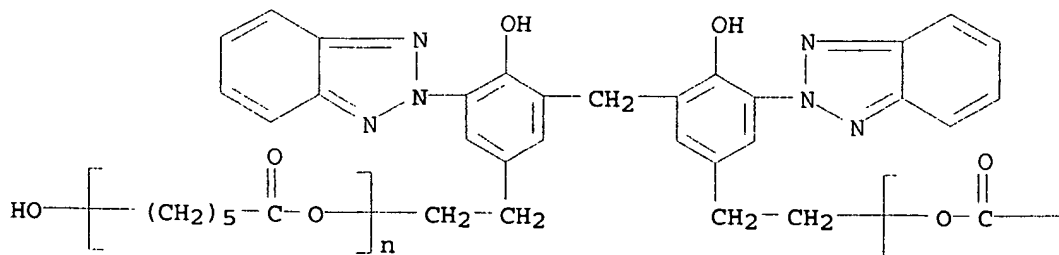
CM 1

CRN 214746-68-6

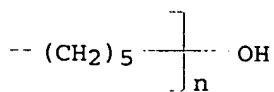
CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-A



PAGE 1-B



CM 2

CRN 144245-98-7

CMF Unspecified

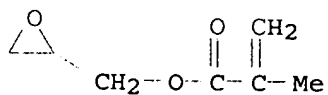
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 106-91-2

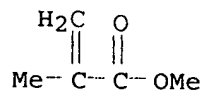
CMF C7 H10 O3



CM 4

CRN 80-62-6

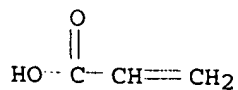
CMF C5 H8 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



IC ICM C08L063-10

ICS C08G018-58; C08G018-62; C08L075-04; C09K003-00

- CC 42-7 (Coatings, Inks, and Related Products)
Section cross-reference(s): 38
- ST **UV absorbent** bisbenzotriazolylphenol polyester coating molding; acrylic polyurethane coating **UV absorbent** bisbenzotriazolylphenol; polyisocyanate acrylic polymer **UV absorbent** coating; methylenebisbenzotriazolylhydroxytrioxotrioxatricosylphenol **UV absorbent** coating; abrasion resistance coating acrylic polyester polyurethane; weather resistance coating acrylic polyester polyurethane; crack resistance coating acrylic polyester polyurethane; scratch resistance coating acrylic polyester polyurethane; chem resistance coating acrylic polyester polyurethane; methyl methacrylate polymer UV curable coating; glycidyl methacrylate polymer UV curable coating; hexane diisocyanate trimer UV curable coating
- IT Coating materials
(**UV-absorbing**; **UV-shielding** photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)
- IT Coating materials
(UV-curable; UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)
- IT UV stabilizers
(UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)
- IT Molded plastics, uses
(UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)
- IT Polyurethanes, uses
Polyurethanes, uses
Polyurethanes, uses
(acrylic-epoxy-polyester-; UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)
- IT Polyesters, uses
Polyesters, uses
Polyesters, uses
(acrylic-epoxy-polyurethane-; UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)
- IT Epoxy resins, uses
Epoxy resins, uses
Epoxy resins, uses
(acrylic-polyester-polyurethane-; UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)
- IT Coating materials
(weather-resistant; UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)
- IT **214746-68-6P**
(UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)
- IT **263904-11-6P**
(UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)
- IT 196516-61-7, RUVA 100
(UV-shielding photocurable resin **compns.** for abrasion-, chemical, weather- and crack-resistant coatings)

L38 ANSWER 25 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:241090 HCAPLUS
 DOCUMENT NUMBER: 132:280643
 TITLE: Transfer sheets for protecting molded articles
 and UV absorbents for use
 in the sheets
 INVENTOR(S): Nakamura, Yuzo
 PATENT ASSIGNEE(S): Nissha Printing Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 36 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000020228	A1	20000413	WO 1999-JP5314	1999 0929
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W: CA, CN, KR, SG, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2000109682	A2	20000418	JP 1998-296212	1998 1001
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JP 3585748	B2	20041104		
JP 2000109773	A2	20000418	JP 1998-296213	1998 1001
<--				
JP 3514640	B2	20040331		
CA 2345361	AA	20000413	CA 1999-2345361	1999 0929
<--				
EP 1125764	A1	20010822	EP 1999-970058	1999 0929
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6527898	B1	20030304	US 2001-787552	2001 0320
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PRIORITY APPLN. INFO.:			JP 1998-296212	A 1998 1001
<--				
			JP 1998-296213	A 1998 1001
<--				
			WO 1999-JP5314	W 1999 0929

OTHER SOURCE(S):

MARPAT 132:280643

AB The transfer sheets comprise a releasable base sheet and a protective layer derived from a **composition** containing radiation-curable polymers having a (meth)acrylic equivalent of 100 to 300 g/equiv, a hydroxyl value of 20 to 500, and a weight-average mol. weight of 5,000 to 50,000, a polyfunctional isocyanate, and a **UV absorber** of bisbenzotriazole-type compds. for preventing their bleeding from resins. Thus, coating a **composition** containing the curable varnish of a glycidyl methacrylate-Me methacrylate copolymer in acrylic acid, 100, Coronate HX 5, Irgacure 184 (photoinitiator) 5 and RUVA-100 {2,2'-methylenebis[6-(2H-1,2,3-benzotriazol-2-yl)-4-(2-hydroxyethyl)phenol]}-ε-caprolactone adduct 10 parts on the release surface of a melamine resin release-coated PET polyester film to a pickup thickness of 5 μm, heating at 150° for 20 s and printing on top with designs using an acrylic ink gave a transfer which adhered to an acrylic molding surface without wrinkle and could be cured with UV light.

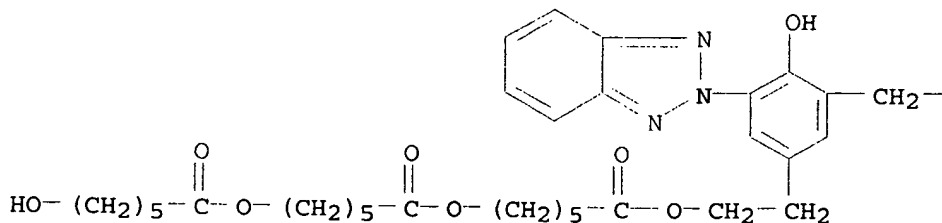
IT 250252-46-1P

(UV-light stabilizer; transfer sheets for protecting molded articles and **UV absorbers** for use in protective layer)

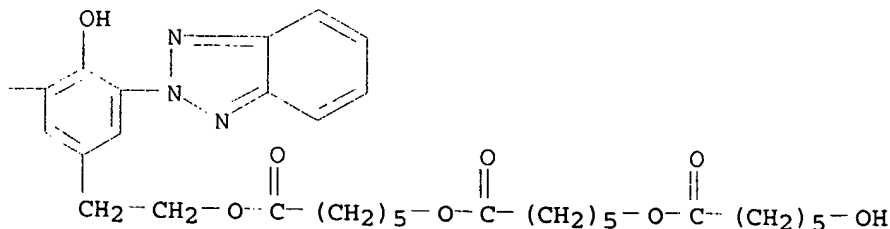
RN 250252-46-1 HCAPLUS

CN Hexanoic acid, 6-[[6-[(6-hydroxy-1-oxohexyl)oxy]-1-oxohexyl]oxy]-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM B44C001-17

CC ICS C08L075-04; C08K005-3475; C08G018-62; C09K003-00; B29C045-14
42-11 (Coatings, Inks, and Related Products)

IT Acrylic polymers, uses

Polyesters, uses

(substrate; transfer sheets for protecting molded articles and

UV absorbents for use in protective layer)

IT Transfers
UV stabilizers
(transfer sheets for protecting molded articles and UV
absorbents for use in protective layer)

IT 947-19-3, Irgacure 184
(UV-light co-stabilizer; transfer sheets for protecting molded
articles and UV absorbents for use in
protective layer)

IT 250252-46-1P
(UV-light stabilizer; transfer sheets for protecting molded
articles and UV absorbents for use in
protective layer)

IT 204701-37-1, Acrylic acid-Coronate HX-glycidyl methacrylate-methyl
methacrylate copolymer
(protective layer; transfer sheets for protecting molded
articles and UV absorbents for use in
protective layer)

IT 25038-59-9, PET polyester, uses
(substrate; transfer sheets for protecting molded articles and
UV absorbents for use in protective layer)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L38 ANSWER 26 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:216114 HCAPLUS

DOCUMENT NUMBER: 132:252153

TITLE: Pressure-sensitive adhesive sheets with
excellent weather resistance

INVENTOR(S): Mori, Koji; Akada, Mitsuo

PATENT ASSIGNEE(S): Ohtsuka Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

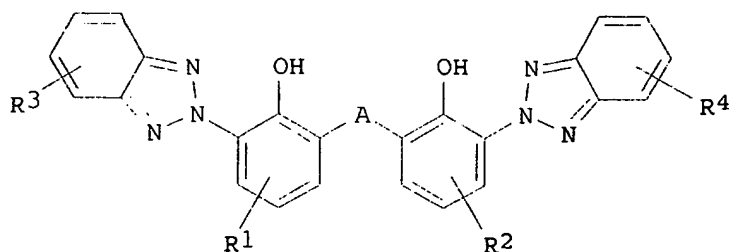
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000096032	A2	20000404	JP 1998-269883	1998 0924
JP 3046007	B2	20000529	<--	
PRIORITY APPLN. INFO.:			JP 1998-269883	1998 0924
			<--	
OTHER SOURCE(S):	MARPAT 132:252153			
GI				



AB The adhesive sheets consist of a fluoro resin film and pressure-sensitive adhesive layer(s) formed from **compns.** based on acrylic, vinyl acetate-, EVA-, polyurethane-, SBR-, natural rubber-, isoprene rubber-, NBR-, and/or silicone-based adhesive resins and bis(benzotriazolyl)phenols I [A = direct link, CH₂, C₂-6 linear or branched alkylene, O, NH; R₃, R₄ = H, C₁-4 alkyl, aryl, C₁-4 alkoxy, halo; R₁, R₂ = R₅O[CO(CR₆R₇)_nO]_mH; R₅ = direct link, C₁-12 linear or branched alkylene; R₆, R₇ = H, C₁-10 alkyl; m = 1-20; n = 4-8]. Thus, 129.3 g Ruva 100 was treated with 170.3 g ε-caprolactone to give 98% product, which was added 1% to an acrylic adhesive (2-ethylhexyl acrylate-Bu acrylate-vinyl acetate-styrene-Me methacrylate-acrylic acid-methacrylic acid-2-hydroxyethyl methacrylate copolymer in PhMe), then the adhesive **composition** was blended with Coronate L, made into a film, and laminated on a fluoropolymer film to give an adhesive sheet showing good adhesion to a PMMA plate even after weathering.

IT 262847-61-0P

(pressure-sensitive adhesive sheets containing bis(benzotriazolyl)phenol compds. with good weather resistance)

RN 262847-61-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, Coronate L, ethenyl acetate, ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]], methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

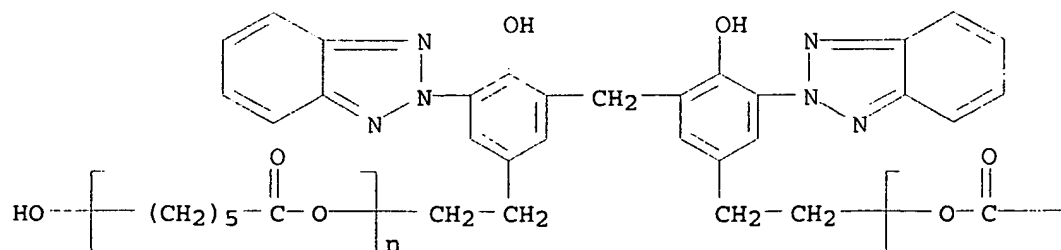
CM 1

CRN 214746-68-6

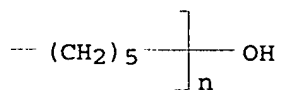
CMF (C₆ H₁₀ O₂)_n (C₆ H₁₀ O₂)_n C₂₉ H₂₆ N₆ O₄

CCI PMS

PAGE 1-A



PAGE 1-B



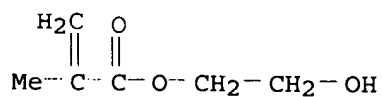
CM 2

CRN 39278-79-0
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

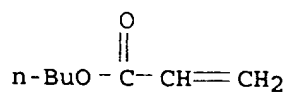
CM 3

CRN 868-77-9
 CMF C6 H10 O3



CM 4

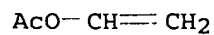
CRN 141-32-2
 CMF C7 H12 O2



CM 5

CRN 108-05-4

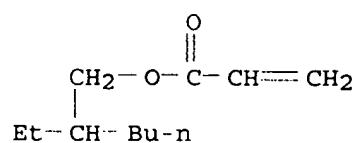
CMF C4 H6 O2



CM 6

CRN 103-11-7

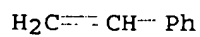
CMF C11 H20 O2



CM 7

CRN 100-42-5

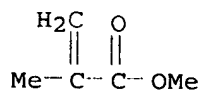
CMF C8 H8



CM 8

CRN 80-62-6

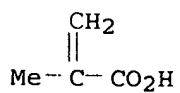
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CM 9

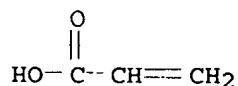
CRN 79-41-4

CMF C4 H6 O2



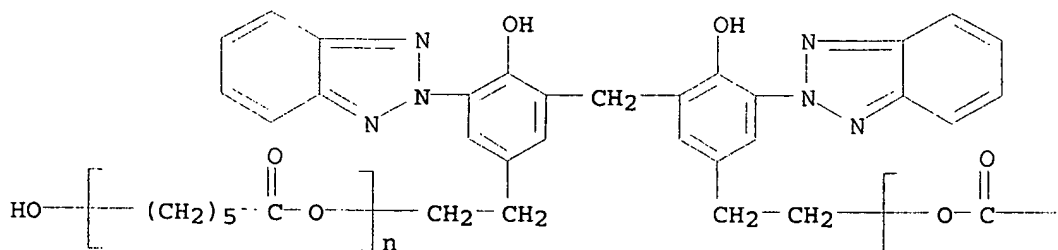
CM 10

CRN 79-10-7
CMF C3 H4 O2

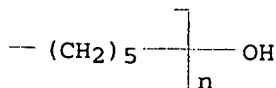


IT 214746-68-6P
(pressure-sensitive adhesive sheets containing
bis(benzotriazolyl)phenol compds. with good weather resistance)
RN 214746-68-6 HCAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(
(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-
ethanediyl]]bis[ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



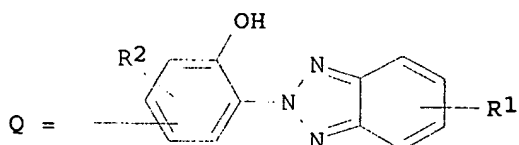
IC ICM C09J201-00
ICS C09J007-02; C09J011-06; C07D249-20; C09K003-00
CC 38-3 (Plastics Fabrication and Uses)
ST benzotriazolylphenol polycaprolactone UV
absorber adhesive sheet
IT 262847-61-0P
(pressure-sensitive adhesive sheets containing
bis(benzotriazolyl)phenol compds. with good weather resistance)
IT 214746-68-6P 215232-60-3P
(pressure-sensitive adhesive sheets containing
bis(benzotriazolyl)phenol compds. with good weather resistance)

L38 ANSWER 27 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:216029 HCAPLUS

DOCUMENT NUMBER: 132:251904
 TITLE: Benzotriazole group-containing polyesters with good compatibility to resins, their manufacture, **UV absorbers**, and chemically resistant resin **compositions** containing them
 INVENTOR(S): Endo, Toshiro; Isobe, Tomohisa; Okumura, Koichi
 PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: **Patent**
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000095849	A2	20000404	JP 1998-265877	1998 0921
KR 2000013679	A	20000306	KR 1998-32674	1998 0812
PRIORITY APPLN. INFO.:			JP 1998-265877	A 1998 0921

GI



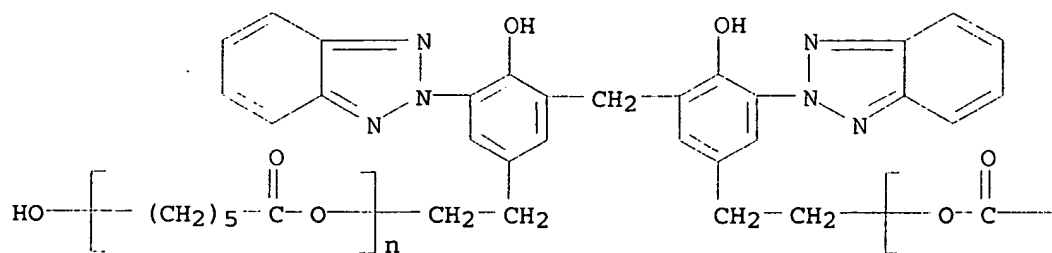
AB QR30[CO(CR4R5)nO]mH or H[O(CR4R5)nCO]mQ'[CO(CR4R5)pO]qH [Q = I; Q' = 3,3'-methylenebis[5-(2H-benzotriazol-2-yl)-4-hydroxybenzeneethanol] residue or its derivs.; R1 = H, halo, C1-10-alkyl; R2, R4, R5 = H, C1-10-alkyl; R3 = C1-10-alkylene; n, p = 4-8; m, q = 1-20] are manufactured by ring-opening polymerization of lactones with the corresponding benzotriazole-containing alcs. Thus, 100 parts polypropylene was mixed with 2 parts polyester prepared from 342 g ε-caprolactone and 134.5 g JF 269 [3-(2H-benzotriazol-2-yl)-4-hydroxybenzeneethanol] and injection-molded to give a dumbbell test piece, showing no change in tensile breaking elongation during a 2000-h exposure test.

IT **214746-68-6P**
 (benzotriazole group-containing polyesters for chemical and light-resistant resin **compns.**)

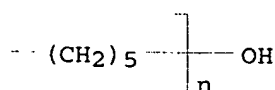
RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxy- (9CI) (CA INDEX NAME)]

PAGE 1-A



PAGE 1-B



- IC ICM C08G063-685
ICS C09K003-00; C07D249-20
- CC 37-6 (Plastics Manufacture and Processing)
- ST benzotriazole caprolactone polyester **UV absorber**
; chem resistance benzotriazolyhydroxybenzeneethanol
polycaprolactone; light resistance polypropylene benzotriazole
polyester blend
- IT Chemically resistant materials
UV stabilizers
(benzotriazole group-containing polyesters for chemical and
light-resistant resin **compns.**)
- IT Polycarbonates, properties
Polyesters, properties
Polyesters, properties
Polyolefins
(benzotriazole group-containing polyesters for chemical and
light-resistant resin **compns.**)
- IT Polyamides, uses
Polyurethanes, uses
(benzotriazole group-containing polyesters for chemical and
light-resistant resin **compns.**)
- IT Polyesters, preparation
(hydroxy-terminated; benzotriazole group-containing polyesters for
chemical and light-resistant resin **compns.**)
- IT **214746-68-6P** 215094-32-9P 215232-60-3P 215437-97-1P
(benzotriazole group-containing polyesters for chemical and
light-resistant resin **compns.**)
- IT 9002-85-1, Poly(vinylidene chloride) 9002-86-2, Poly(vinyl
chloride) 9003-07-0, Polypropylene 9003-53-6, Polystyrene
9003-56-9, Acrylonitrile-butadiene-styrene copolymer 9011-14-7,
Poly(methyl methacrylate) 25038-59-9, Poly(ethylene

terephthalate), properties
(benzotriazole group-containing polyesters for chemical and
light-resistant resin **compns.**)

L38 ANSWER 28 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:168138 HCAPLUS

DOCUMENT NUMBER: 132:223375

TITLE: Benzotriazole group-containing polyester
UV absorbents

INVENTOR(S): Okumura, Koichi; Endo, Toshio; Isobe, Tomohisa

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: U.S., 20 pp.
CODEN: USXXAM

DOCUMENT TYPE: **Patent**

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6037393	A	20000314	US 1998-164665	1998 1001
CN 1246476	A	20000308	CN 1998-118816	1998 0827
CN 1125820	B	20031029		
EP 989124	A1	20000329	EP 1998-402368	1998 0925
EP 989124	B1	20020814		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			US 1998-164665	A 1998 1001

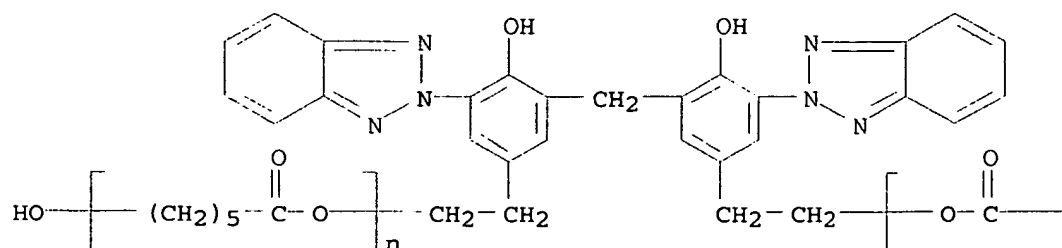
AB Polyester compds. having a benzotriazole group are obtained by a ring-opening addition-polymerization of lactones with the alc. hydroxyl group of 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethyl-ethyl)-4-hydroxy-benzene -propanol, 3-(2H-benzotriazol-2-yl)-4-hydroxy-benzene-ethanol, 3-(5-methyl-2H-benzotriazol-2-yl)-5-(1-methyl-ethyl)-4-hydroxy-benzene-propanolbis[3-(2H-benzotriazol-2-yl)-4-hydroxy-benzene-ethanol]methane or the like. These compds. are used as **UV absorbents** for thermoplastic resins. The resulting resin **composition** has an excellent light resistance and chemical resistance.

IT 214746-68-6P
(**UV absorbent**; benzotriazole group-containing polyester **UV absorbents**)

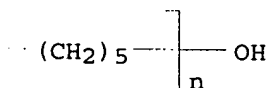
RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxy- (9CI) (CA INDEX NAME)

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PAGE 1-B



- IC ICM C08K005-34
ICS C07D249-16
INCL 524091000
CC 37-6 (Plastics Manufacture and Processing)
ST benzotriazole group polyester **UV absorbent**
IT UV stabilizers
(benzotriazole group-containing polyester **UV absorbents**)
IT Acrylic polymers, properties
Polyamides, properties
Polycarbonates, properties
Polyesters, properties
Polyolefins
(benzotriazole group-containing polyester **UV absorbents**)
IT Polyesters, preparation
(benzotriazole group-containing, **UV absorbent**;
benzotriazole group-containing polyester **UV absorbents**)
IT Polyurethanes, properties
(thermoplastic; benzotriazole group-containing polyester **UV absorbents**)
IT **214746-68-6P** 215094-32-9P 215232-60-3P 215437-97-1P
(**UV absorbent**; benzotriazole group-containing polyester **UV absorbents**)
IT 9002-85-1, Polyvinylidene-chloride 9002-86-2, Polyvinyl-chloride
9003-07-0, Polypropylene 9003-53-6, Polystyrene 9003-56-9,
Acrylonitrile-butadiene-styrene resin 9011-14-7, Poly(methyl
methacrylate 25038-59-9, Polyethylene terephthalate, properties
(benzotriazole group-containing polyester **UV absorbents**)

L38 ANSWER 29 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:129776 HCAPLUS
 DOCUMENT NUMBER: 132:174596
 TITLE: Polymer solid electrolyte and electrochromic device using it
 INVENTOR(S): Nishikitani, Yoshinori; Kobayashi, Masaaki; Imafuku, Hiroshi
 PATENT ASSIGNEE(S): Nisseki Mitsubishi K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000057844	A2	20000225	JP 1998-221903	1998 0805

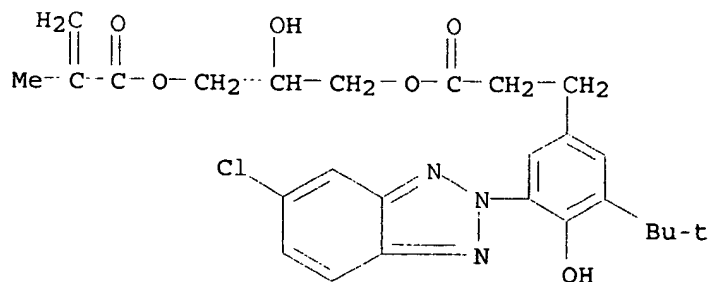
PRIORITY APPLN. INFO.: JP 1998-221903
 1998
 0805

AB The electrolyte is manufactured by curing a **composition** containing (A) a ethylenic double bond-containing polymerizable **UV absorber** and (B) a polymer solid electrolyte precursor containing a polymerizable monomer and a supporting electrolytic substance. The device is equipped with an electrolytic layer comprising the electrolyte. The electrolyte shows **UV absorbing** characteristic, high ionic conductivity, and excellent light resistance.

IT 253588-79-3P
 (polymer solid electrolyte containing **UV absorber** for electrochromic device)

RN 253588-79-3 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



IC ICM H01B001-12

ICS G02F001-15

CC 76-10 (Electric Phenomena)

Section cross-reference(s): 38

ST ethylenic polymer solid electrolyte electrochromic device;
UV absorber solid polymer electrolyte; ionic

conductor ethylenic crosslinking polymer electrolyte

IT Electrochromic devices
Polymer electrolytes
UV stabilizers
(polymer solid electrolyte containing **UV absorber**
for electrochromic device)

IT 25852-47-5, Polyethyleneglycol dimethacrylate
(9G; polymer solid electrolyte containing **UV absorber** for electrochromic device)

IT 26915-72-0, M 40G
(M 40G; polymer solid electrolyte containing **UV absorber** for electrochromic device)

IT 32171-39-4, NK Ester AM 40G
(NK Ester AM 40G; polymer solid electrolyte containing **UV absorber** for electrochromic device)

IT 106-91-2P, Glycidyl methacrylate
(polymer solid electrolyte containing **UV absorber** for electrochromic device)

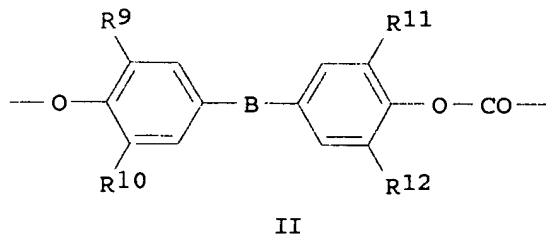
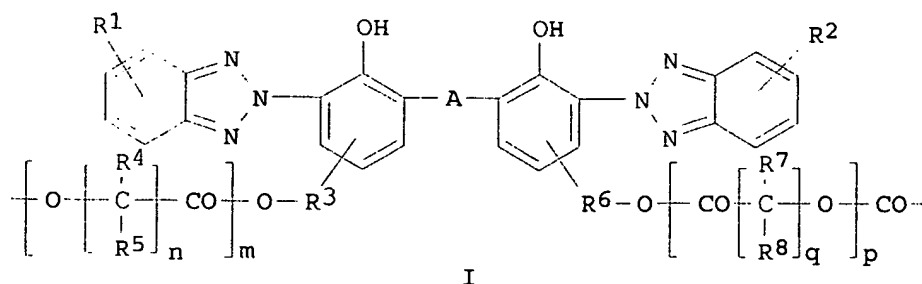
IT 253588-79-3P
(polymer solid electrolyte containing **UV absorber** for electrochromic device)

IT 83573-67-5
(polymer solid electrolyte containing **UV absorber** for electrochromic device)

L38 ANSWER 30 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:120904 HCAPLUS
DOCUMENT NUMBER: 132:167754
TITLE: **UV-absorbing** polymers and
their weather-resistant **compositions**
INVENTOR(S): Kono, Kazuhiro; Mori, Hiroshi; Akada, Mitsuo
PATENT ASSIGNEE(S): Ohtsuka Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000053754	A2	20000222	JP 1999-157136	1999 0603
			<--	
JP 3048573	B2	20000605		
PRIORITY APPLN. INFO.:			JP 1998-154952	A 1998 0603
			<--	

GI



AB Title polymers having viscosity-average mol. weight (Mv) 5000-100,000, and useful for coatings, etc., comprise 0.01-70% I (A = direct bond, C1-6 alkylene, O, NH, S, SO, SO₂; R₁, R₂ = H, C1-4 alkyl, aryl, C1-4 alkoxy, halo; R₃, R₆ = direct bond, C1-12 alkylene; R₄, R₅, R₇, R₈ = H, C1-10 alkyl; m, p = 1-20; n, q = 1-10) units and II (B = C1-10 alkylene, O, CO, NH, S, SO, SO₂; R₉-R₁₂ = H, halo, C1-4 alkyl or alkoxy) units. Thus, reacting 129.3 g 2,2'-methylenebis[6-(2H-benzotriazol-2-yl)-4-(2-hydroxyethyl)phenol] (RUVA 100) with 170.3 g caprolactone gave a diol (Mw 1688), which (0.356 g) was polymerized with 1.72 g bisphenol A and 2.08 g triphosgene to give a polymer with Mv 25,100, yellow index difference (ΔYI) 0.2 after 1200 h under sunshine weatherometer and retention of absorbance 98.8% after 40 h at 70° in H₂O.

IT 259105-43-6P 259105-45-8P 259105-46-9P
259105-47-0P

(UV-absorbing polymers and
weather-resistant coatings)

RN 259105-43-6 HCAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with bis(trichloromethyl) carbonate and α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]] (9CI) (CA INDEX NAME)

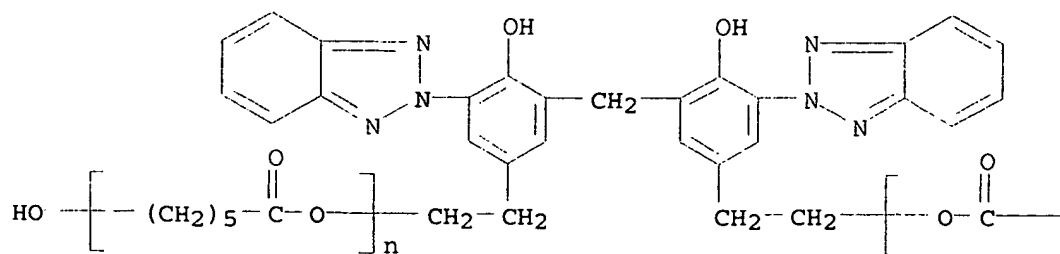
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CRN 214746-68-6

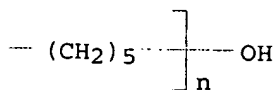
CMF (C6 H10 O2)_n (C6 H10 O2)_n C29 H26 N6 O4

CCI PMS

PAGE 1-A



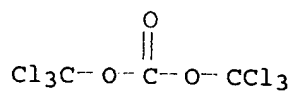
PAGE 1-B



CM 2

CRN 32315-10-9

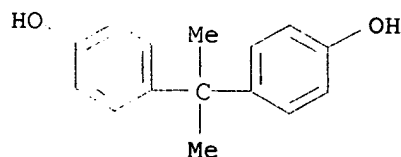
CMF C3 C16 O3



CM 3

CRN 80-05-7

CMF C15 H16 O2



RN 259105-45-8 HCAPLUS

CN Carbonic acid, polymer with α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]] and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

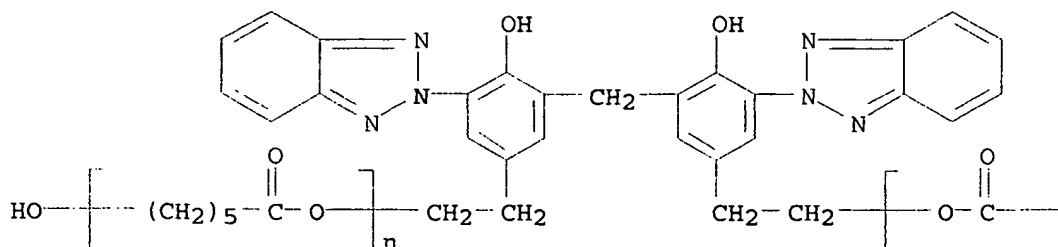
CM 1

CRN 214746-68-6

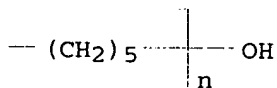
CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-A



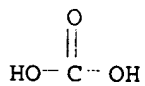
PAGE 1-B



CM 2

CRN 463-79-6

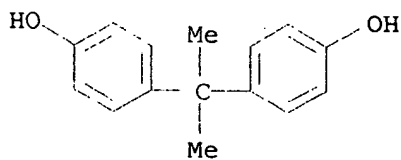
CMF C H2 O3



CM 3

CRN 80-05-7

CMF C15 H16 O2

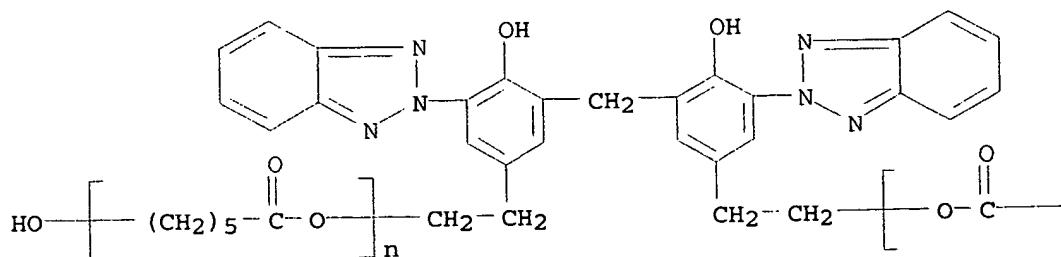


RN 259105-46-9 HCAPLUS
 CN 1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with
 1,2-ethanediol and α,α' -[methylenebis[[5-(2H-
 benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-
 ethanediyl]]bis[ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]
 (9CI) (CA INDEX NAME)

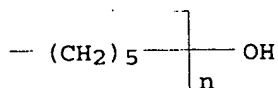
CM 1

CRN 214746-68-6
 CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4
 CCI PMS

PAGE 1-A

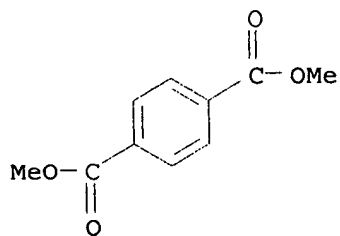


PAGE 1-B



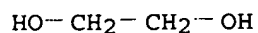
CM 2

CRN 120-61-6
 CMF C10 H10 O4



CM 3

CRN 107-21-1
CMF C2 H6 O2

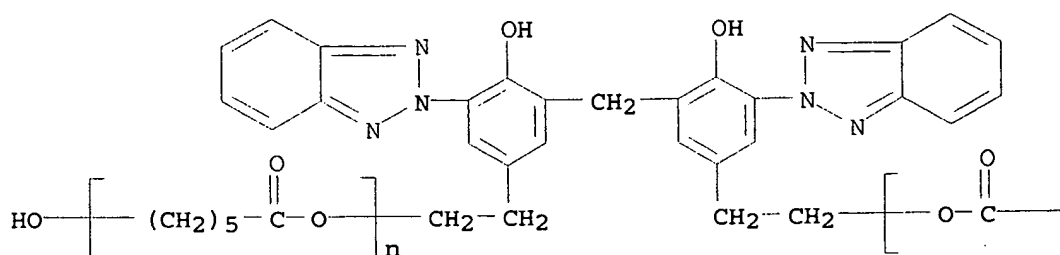


RN 259105-47-0 HCAPLUS
CN 1,2-Ethanediol, polymer with α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]] and 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

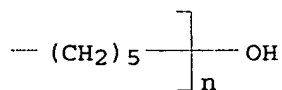
CM 1

CRN 214746-68-6
CMF (C6 H10 O2)_n (C6 H10 O2)_n C29 H26 N6 O4
CCI PMS

PAGE 1-A

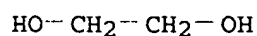


PAGE 1-B



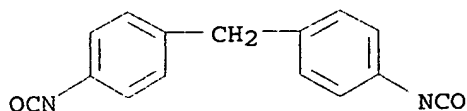
CM 2

CRN 107-21-1
CMF C2 H6 O2



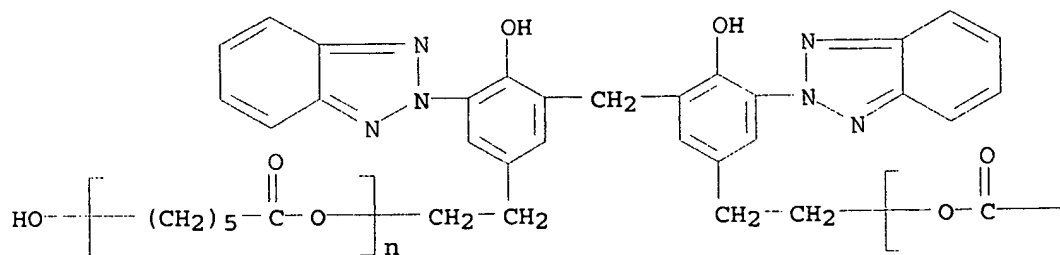
CM 3

CRN 101-68-8
CMF C15 H10 N2 O2

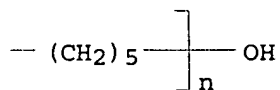


IT 214746-68-6P
(UV-absorbing polymers and
weather-resistant coatings)
RN 214746-68-6 HCAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C08G063-685
ICS C08G018-46; C08G064-12; C08L067-02; C08L069-00; C08L075-04;
C07D249-20
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 37
ST UV absorbing benzotriazole polymer;
benzotriazole polyester polycarbonate; weather resistant
benzotriazole polycarbonate coating
IT Polyesters, uses
(UV-absorbing polymers and
weather-resistant coatings)
IT Coating materials
(UV-absorbing; UV-

absorbing polymers and weather-resistant coatings)

IT Polyesters, uses
Polyesters, uses
(polycarbonate-; **UV-absorbing** polymers and
weather-resistant coatings)

IT Polycarbonates, uses
Polycarbonates, uses
Polyurethanes, uses
(polyester-; **UV-absorbing** polymers and
weather-resistant coatings)

IT Coating materials
(weather-resistant; **UV-absorbing** polymers
and weather-resistant coatings)

IT 259105-43-6P 259105-45-8P 259105-46-9P
259105-47-0P
(**UV-absorbing** polymers and
weather-resistant coatings)

IT 214746-68-6P
(**UV-absorbing** polymers and
weather-resistant coatings)

IT 502-44-3, 2-Oxepanone 196516-61-7, RUVA 100
(**UV-absorbing** polymers and
weather-resistant coatings)

L38 ANSWER 31 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:116788 HCAPLUS

DOCUMENT NUMBER: 132:153375

TITLE: weather- and water-resistant paint
compositions for roofs and exterior
walls of constructions

INVENTOR(S): Yanauchi, Kazuo; Yamazaki, Takayoshi

PATENT ASSIGNEE(S): Taisei Chemical Industries Ltd., Japan

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: **Patent**

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
EP 979836	A1	20000216	EP 1999-306297	1999 0810
<--				
EP 979836	B1	20041215		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000053913	A2	20000222	JP 1998-226446	1998 0811
<--				
JP 3059704	B2	20000704		
US 6248828	B1	20010619	US 1999-369122	1999 0805
<--				
AT 284909	E	20050115	AT 1999-306297	1999

0810

PRIORITY APPLN. INFO.:

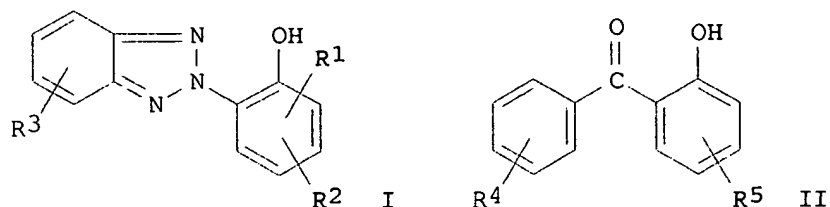
JP 1998-226446

A

1998

0811

GI



AB Title **composition** comprises (A) an isocyanate blend containing (a) an isocyanate compound having functional group with **UV absorbability** on a side chain and a residual isocyanate group, and prepared by reacting an isocyanate prepolymer or monomer having at least two free isocyanate groups (e.g., hexamethylene diisocyanate isocyanurate) with an **UV absorber** I and II (R1, R2, R4, R5 = H, C1-10 hydrocarbyl, C1-10 alkoxy; R3 = H, halogen, C1-10 alkoxy, cyano, nitro; e.g., 2-(2'-hydroxy-5'-methylphenyl)benzotriazole) and (b) an isocyanate prepolymer (different from A; e.g., Acrit 8XA-012), and (B) an active hydrogen-containing polymer (e.g., hydroxy-containing acrylic polymer prepared from cyclohexyl methacrylate, Me methacrylate, Bu acrylate, 2-hydroxyethyl methacrylate, acrylic acid, 2-[2'-hydroxy-5'-(methacryloyloxyethyl)phenyl]benzotriazole, methacryloylamino-2,2,6,6-tetramethyl piperidine, dimethylaminoethyl methacrylate-glycidyl methacrylate copolymer and 2-methacryloyloxyethyl phthalate-glycidyl methacrylate copolymer).

IT 257299-67-5DP, polymers with hydroxy benzotriazole- or benzophenone-containing isocyanate compds. and isocyanate prepolymer (weather- and water-resistant paint **compns.** for roofs and exterior walls of constructions)

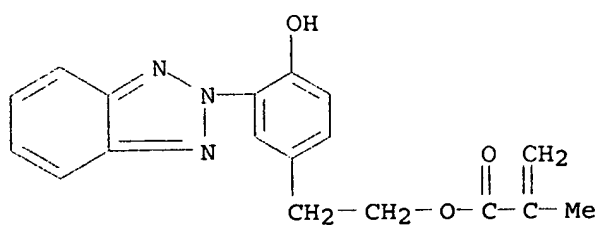
RN 257299-67-5 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, bis[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, butyl 2-propenoate, cyclohexyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-methyl-N-(2,2,6,6-tetramethyl-4-piperidinyl)-2-propenamide, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

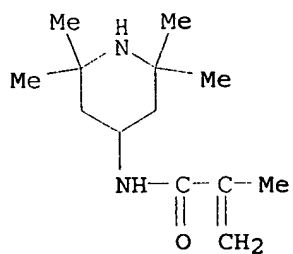
CMF C18 H17 N3 O3



CM 2

CRN 31582-46-4

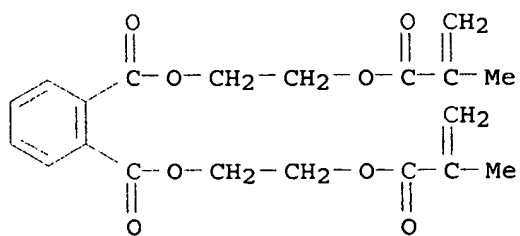
CMF C13 H24 N2 O



CM 3

CRN 10552-43-9

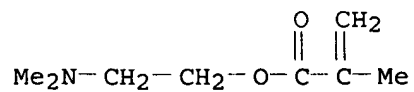
CMF C20 H22 O8



CM 4

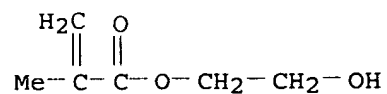
CRN 2867-47-2

CMF C8 H15 N O2



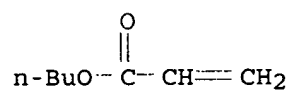
CM 5

CRN 868-77-9
CMF C6 H10 O3



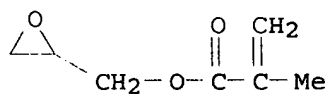
CM 6

CRN 141-32-2
CMF C7 H12 O2



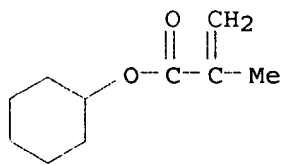
CM 7

CRN 106-91-2
CMF C7 H10 O3



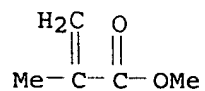
CM 8

CRN 101-43-9
CMF C10 H16 O2



CM 9

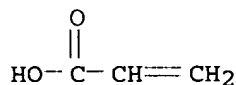
CRN 80-62-6
CMF C5 H8 O2



CM 10

CRN 79-10-7

CMF C3 H4 O2



IC ICM C08G018-78

ICS C08G018-80

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 58

ST polyurethane acrylic paint weather resistance construction;
UV absorbability polyurethane coating water
resistance

IT Polyurethanes, uses

(acrylic; weather- and water-resistant paint **compns.**
for roofs and exterior walls of constructions)

IT Polyoxyalkylenes, uses

(triol, polymers with polyisocyanates; weather- and
water-resistant paint **compns.** for roofs and exterior
walls of constructions)

IT Coating materials

(water- and weather-resistant; weather- and water-resistant
paint **compns.** for roofs and exterior walls of
constructions)

IT Construction materials

Paints

(weather- and water-resistant paint **compns.** for roofs
and exterior walls of constructions)

IT Polyurethanes, uses

(weather- and water-resistant paint **compns.** for roofs
and exterior walls of constructions)IT 822-06-0DP, HMDI, reaction products with hydroxy-containing
benzotriazole or benzophenone, polymers with acrylic polyols
1843-05-6DP, 2-Hydroxy-4-n-octoxybenzophenone, reaction products
with polyisocyanates, polymers with acrylic polyols 2440-22-4DP,
2-(2'-Hydroxy-5'-methylphenyl)benzotriazole, reaction products
with polyisocyanates, polymers with acrylic polyols 3779-63-3DP,
Hexamethylene diisocyanate isocyanurate, reaction products with
hydroxy-containing benzotriazole or benzophenone, polymers with
acrylic polyols 4035-89-6DP, HMDI biuret, reaction products with
hydroxy-containing benzotriazole or benzophenone, polymers with
acrylic polyols 25322-68-3DP, Polyethylene glycol, triol,
polymers with polyisocyanates 50886-64-1DP, reaction products
with hydroxy-containing benzotriazole or benzophenone, polymers with
acrylic polyols 257299-67-5DP, polymers with hydroxy
benzotriazole- or benzophenone-containing isocyanate compds. and
isocyanate prepolymer 257947-03-8DP, Acrit 8XA012, polymers with
acrylic polyols(weather- and water-resistant paint **compns.** for roofs
and exterior walls of constructions)

REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L38 ANSWER 32 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:23319 HCAPLUS
 DOCUMENT NUMBER: 132:79777
 TITLE: Metallic finishing method for metal- or plastic-made automobile bodies
 INVENTOR(S): Nakamura, Shigeru; Nakao, Yasushi
 PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2000005695	A2	20000111	JP 1998-181805	1998 0629

PRIORITY APPLN. INFO.: <--
 JP 1998-181805
 1998
 0629

AB Title method involves (a) coating metallic coatings containing colorant-colored Al flakes further coated with light stabilizer- and/or UB absorber-containing resins and (b) finishing with clear **composn.** The Colofine red 236A-colored Alpaste 725N flakes were coated with a solution containing acrylic acid-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate-trimethylolpropane trimethacrylate copolymer and mixed with a OH-containing acrylic resin and melamine resin to form a metallic **composition**, which was sprayed on a polyester middle **composition**-coated and epoxy resin-deposited phosphated steel panel, deposited with Luga bake clear, and baked to form a panel showing color deviation of 1.4 after 1,200 h under weatherometer.

IT 247579-96-0P 247579-97-1P, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate copolymer 247579-98-2P, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate copolymer (light stabilizer/UV **absorber**-containing resin-coated colored Al flake-containing metallic coatings in finishing method for discoloration prevention)

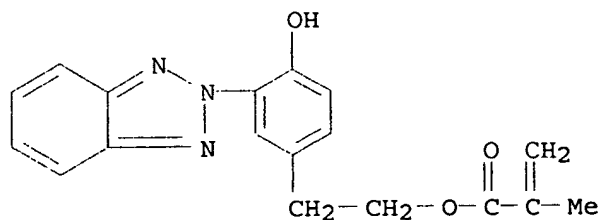
RN 247579-96-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4-piperidiny 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

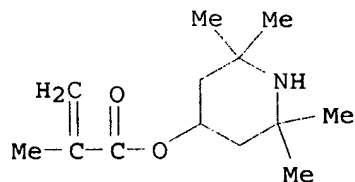
CMF C18 H17 N3 O3



CM 2

CRN 31582-45-3

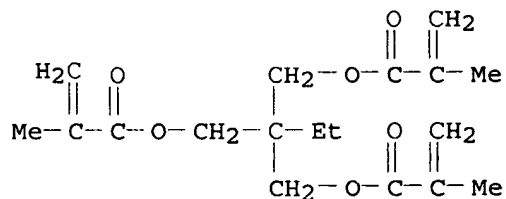
CMF C13 H23 N O2



CM 3

CRN 3290-92-4

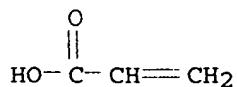
CMF C18 H26 O6



CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 247579-97-1 HCAPLUS

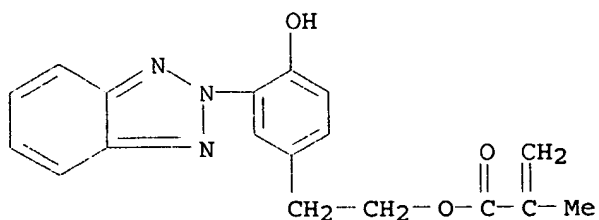
CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4-

piperidiny 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

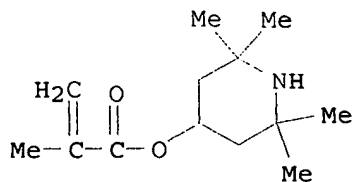
CMF C18 H17 N3 O3



CM 2

CRN 31582-45-3

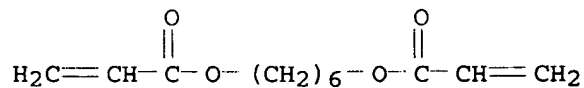
CMF C13 H23 N O2



CM 3

CRN 13048-33-4

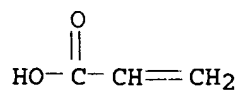
CMF C12 H18 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 247579-98-2 HCAPLUS

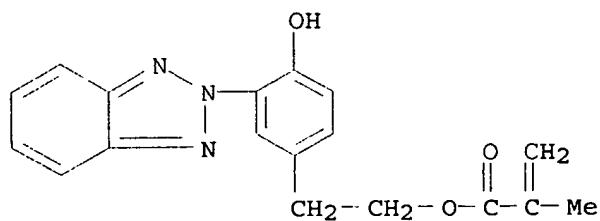
CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-

hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl
 di-2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidiny1
 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

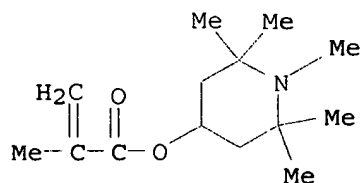
CMF C18 H17 N3 O3



CM 2

CRN 68548-08-3

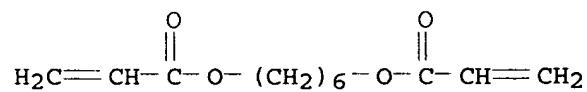
CMF C14 H25 N O2



CM 3

CRN 13048-33-4

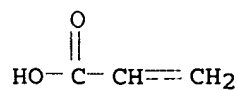
CMF C12 H18 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM B05D005-06
ICS B05D001-36; B05D007-14; C08F020-34; C08F026-06; C09C001-64;
C09C003-10

CC 42-7 (Coatings, Inks, and Related Products)

ST light stabilizer **UV absorber** polymer coated
colored aluminum pigment; finishing method metallic coating
modified aluminum flake; automobile body finishing method metallic
coating

IT Metals, miscellaneous
Molded plastics, miscellaneous
(automobile bodies; light stabilizer/**UV absorber**-containing resin-coated colored Al flake-containing
metallic coatings in finishing method for discoloration
prevention)

IT Automobiles
(bodies; light stabilizer/**UV absorber**
-containing resin-coated colored Al flake-containing metallic coatings
in finishing method for discoloration prevention)

IT Aminoplasts
(in metallic coating; light stabilizer/**UV absorber**-containing resin-coated colored Al flake-containing
metallic coatings in finishing method for discoloration
prevention)

IT Discoloration prevention
Pigments, nonbiological
(light stabilizer/**UV absorber**-containing resin-coated colored Al flake-containing metallic coatings in
finishing method for discoloration prevention)

IT Acrylic polymers, uses
(light stabilizer/**UV absorber**-containing resin-coated colored Al flake-containing metallic coatings in
finishing method for discoloration prevention)

IT Coating materials
(weather-resistant; light stabilizer/**UV absorber**-containing resin-coated colored Al flake-containing
metallic coatings in finishing method for discoloration
prevention)

IT 66105-72-4, Luga bake clear
(clear coating; light stabilizer/**UV absorber**
-containing resin-coated colored Al flake-containing metallic coatings
in finishing method for discoloration prevention)

IT 9003-08-1, Melamine resin
(in metallic coating; light stabilizer/**UV absorber**-containing resin-coated colored Al flake-containing
metallic coatings in finishing method for discoloration
prevention)

IT 247579-96-0P 247579-97-1P, Acrylic
acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'-
methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-
piperidyl methacrylate copolymer 247579-98-2P, Acrylic
acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'-
methacryloxyethylphenyl)-2H-benzotriazole-1,2,2,6,6-pentamethyl-4-
piperidyl methacrylate copolymer
(light stabilizer/**UV absorber**-containing resin-coated colored Al flake-containing metallic coatings in
finishing method for discoloration prevention)

IT 147-14-8, Heliogen blue L 6900 130213-50-2, Colofine red 236A
(light stabilizer/**UV absorber**-containing resin-coated colored Al flake-containing metallic coatings in
finishing method for discoloration prevention)

IT 7429-90-5, Alpaste 725N, uses
(light stabilizer/**UV absorber**-containing
resin-coated colored Al flake-containing metallic coatings in
finishing method for discoloration prevention)

L38 ANSWER 33 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:801357 HCAPLUS
DOCUMENT NUMBER: 132:37003
TITLE: Formation of multilayered coating films with
weather resistance for automobile panels
INVENTOR(S): Nakamura, Shigeru; Nakao, Yasushi
PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 11347489	A2	19991221	JP 1998-163402	1998 0611

PRIORITY APPLN. INFO.: <--
JP 1998-163402
1998
0611

AB Title formation involves coating with colored coatings, metallic
coatings containing Al flakes pre-treated with pigments and **UV
absorber**- and/or light stabilizer-containing resins, and clear
coatings. A substrate was coated with a colored **composition**
containing melamine resin (I) and OH-containing an acrylic resin (A), then
with a **composition** containing A, I, and Al flakes pre-treated
with Colofine red 236A and acrylic acid-trimethylolpropane
ttrimethacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-
benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate
copolymer, and a Luga Bake clear to form a product showing color
deviation 1.5 after 1,200 h under sunshine weatherometer.

IT **247579-96-0P**, Acrylic acid-trimethylolpropane
trimethacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-
benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate
copolymer **247579-97-1P**, Acrylic acid-1,6-hexanediol
diacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-
benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate
copolymer **247579-98-2P**, Acrylic acid-1,6-hexanediol
diacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-
benzotriazole-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate
copolymer
(**UV absorber**/light stabilizer-containing resin-
and colorant-treated Al flake metallic coatings in formation of
multilayer films)

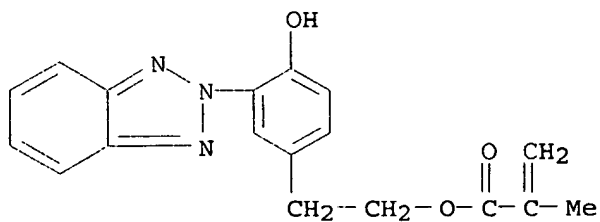
RN 247579-96-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[2-methyl-1-oxo-2-
propenyl]oxy]methyl]-1,3-propanediyl ester, polymer with
2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl
2-methyl-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4-
piperidiny 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

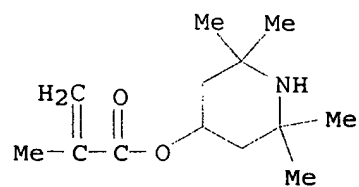
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CM 2

CRN 31582-45-3

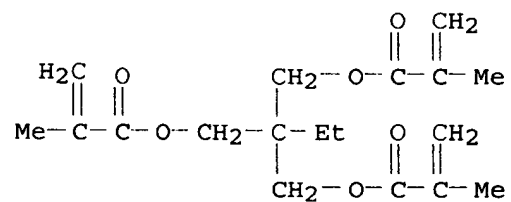
CMF C13 H23 N O2



CM 3

CRN 3290-92-4

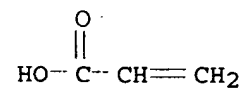
CMF C18 H26 O6



CM 4

CRN 79-10-7

CMF C3 H4 O2



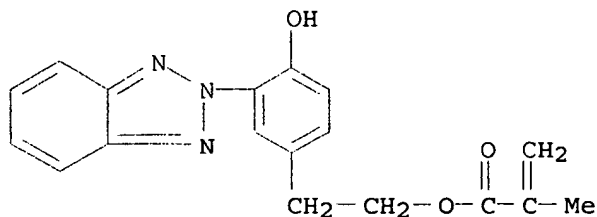
RN 247579-97-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4-piperidiny 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

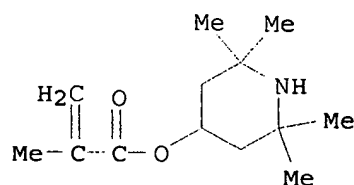
CMF C18 H17 N3 O3



CM 2

CRN 31582-45-3

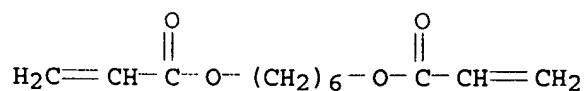
CMF C13 H23 N O2



CM 3

CRN 13048-33-4

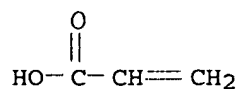
CMF C12 H18 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



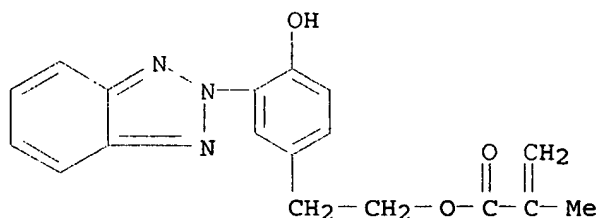
RN 247579-98-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidinyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

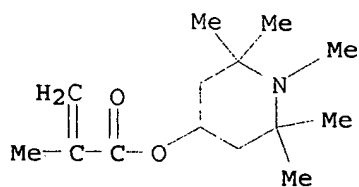
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CM 2

CRN 68548-08-3

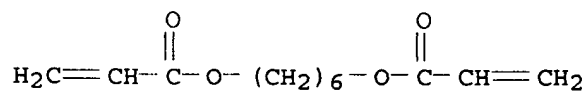
CMF C14 H25 N O2



CM 3

CRN 13048-33-4

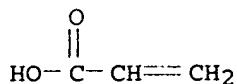
CMF C12 H18 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



- IC ICM B05D007-24
ICS B05D001-36; B05D005-06; B05D007-14; C09D005-38; C08F026-06;
C09C001-64; C09C003-10
- CC 42-7 (Coatings, Inks, and Related Products)
- ST automobile multilayered coating weather resistance; **UV absorber** light stabilizer acrylic resin treatment aluminum flake
- IT Discoloration prevention
Pigments, nonbiological
(**UV absorber**/light stabilizer-containing resin- and colorant-treated Al flake metallic coatings in formation of multilayer films)
- IT Aminoplasts
(**UV absorber**/light stabilizer-containing resin- and colorant-treated Al flake metallic coatings in formation of multilayer films)
- IT Acrylic polymers, uses
(hydroxy-containing; **UV absorber**/light stabilizer-containing resin- and colorant-treated Al flake metallic coatings in formation of multilayer films)
- IT Coating materials
(multilayer; **UV absorber**/light stabilizer-containing resin- and colorant-treated Al flake metallic coatings in formation of multilayer films)
- IT Automobiles
(panels; **UV absorber**/light stabilizer-containing resin- and colorant-treated Al flake metallic coatings in formation of multilayer films)
- IT **247579-96-0P**, Acrylic acid-trimethylolpropane trimethacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate copolymer **247579-97-1P**, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate copolymer **247579-98-2P**, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate copolymer
(**UV absorber**/light stabilizer-containing resin- and colorant-treated Al flake metallic coatings in formation of multilayer films)
- IT 147-14-8, Heliogen blue L 6900 84632-65-5, Irgazin DPP red BO 130213-50-2, Colofine red 236A
(**UV absorber**/light stabilizer-containing resin- and colorant-treated Al flake metallic coatings in formation of multilayer films)
- IT 9003-08-1, Melamine resin
(**UV absorber**/light stabilizer-containing resin- and colorant-treated Al flake metallic coatings in formation of multilayer films)
- IT 66105-72-4, Luga Bake Clear
(**UV absorber**/light stabilizer-containing resin-

and colorant-treated Al flake metallic coatings in formation of multilayer films)

IT 7429-90-5, Aluminum, uses
(flake; **UV absorber**/light stabilizer-containing
resin- and colorant-treated Al flake metallic coatings in
formation of multilayer films)

L38 ANSWER 34 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:751749 HCAPLUS

DOCUMENT NUMBER: 132:13180

TITLE: Water- and whether-resistant recording liquid
composition

INVENTOR(S): Mori, Hiroshi; Akata, Atsuo

PATENT ASSIGNEE(S): Ohtsuka Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 11323231	A2	19991126	JP 1998-127835	1998 0511
			<--	
JP 2969102	B2	19991102	JP 1998-127835	1998 0511
PRIORITY APPLN. INFO.:				

AB Title **composition** comprises an oil-soluble dye and a bisbenzotriazole-phenol **UV-absorbent**. Thus, 2,2'-methylenebis[6-(2H-benzotriazol-2-yl)-4-(2-hydroxyethyl)phenol] (RUVA 100) 129.3 g was reacted with ε-caprolactone 170.3 g to give a product having Mn 1392, Mw 1688, 2 g of which was mixed with 5 g C.I.Solvent Red 495, di-Et phthalate 43 g to give a recording liquid, showing good properties.

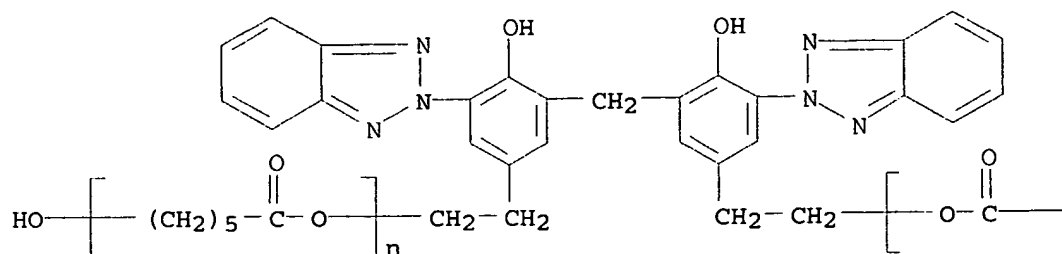
IT 214746-68-6P

(Water- and whether-resistant recording liquid **composition**)

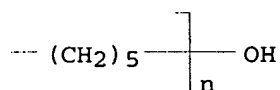
RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC	ICM C09D011-02
	ICS C07D249-20; C09K003-00
CC	42-12 (Coatings, Inks, and Related Products)
ST	UV absorbent recording liq
IT	Recording materials
	UV stabilizers
	(Water- and whether-resistant recording liquid composition)
IT	214746-68-6P
	(Water- and whether-resistant recording liquid composition)
IT	502-44-3, ε-Caprolactone 196516-61-7, RUVA 100
	(Water- and whether-resistant recording liquid composition)

L38 ANSWER 35 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:698272 HCAPLUS
DOCUMENT NUMBER: 131:311734
TITLE: Coloring aluminum pigments and their metallic
coating **compositions**
INVENTOR(S): Nakamura, Shigeru; Nakao, Yasushi; Egawa,
Takao
PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11302558	A2	19991102	JP 1998-107212	1998

0417

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PRIORITY APPLN. INFO.:

JP 1998-107212

1998

0417

<--

AB Title pigments are Al flakes colored with pigments and coated with UV absorbent- and/or light stabilizer-containing resins. Ball milling Mirror Glow 1000 with Irgazin DPP red BO in mineral spirit and heating with a composition containing AIBN, 2-(2'-hydroxy-5-methacryloxyethylphenyl)-2H-benzotriazole, 2,2,6,6-tetramethyl-4-piperidyl methacrylate, acrylic acid, and 1,6-hexanediol diacrylate gave a pigment, which was mixed in an acrylic coating to form films showing color deviation 0.2 and 2.0 under weatherometer for 400 h and 1,200 h, resp.

IT 247579-96-0P, Acrylic acid-2-(2'-hydroxy-5-methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate-trimethylolpropane trimethacrylate copolymer 247579-97-1P, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5-methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate copolymer 247579-98-2P, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5-methacryloxyethylphenyl)-2H-benzotriazole-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate copolymer

(UV absorber/light stabilizer-containing resin-coated and colored Al pigments for coatings with weather-resistant colors)

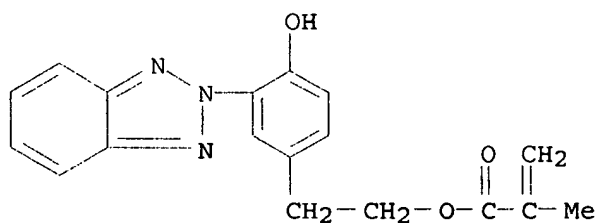
RN 247579-96-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[(2-methyl-1-oxo-2-propenyl)oxy)methyl]-1,3-propanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4-piperidyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

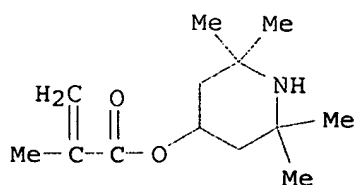
CMF C18 H17 N3 O3



CM 2

CRN 31582-45-3

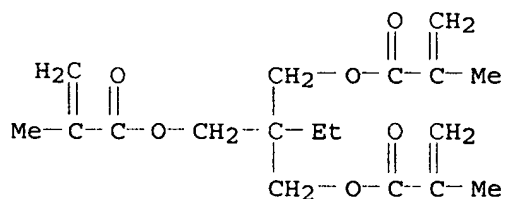
CMF C13 H23 N O2



CM 3

CRN 3290-92-4

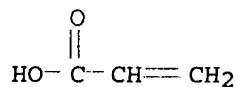
CMF C18 H26 O6



CM 4

CRN 79-10-7

CMF C3 H4 O2



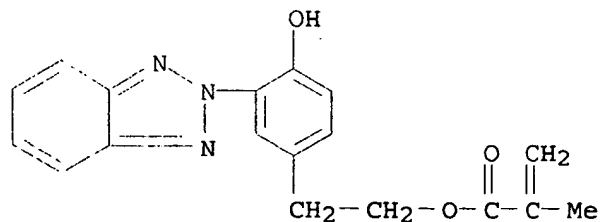
RN 247579-97-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4-piperidiny 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

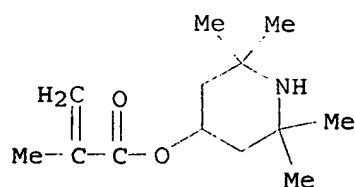
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CM 2

CRN 31582-45-3

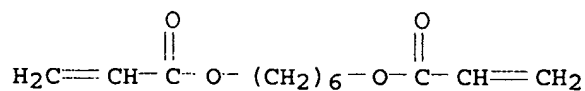
CMF C13 H23 N O2



CM 3

CRN 13048-33-4

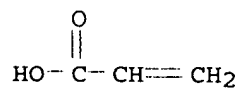
CMF C12 H18 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



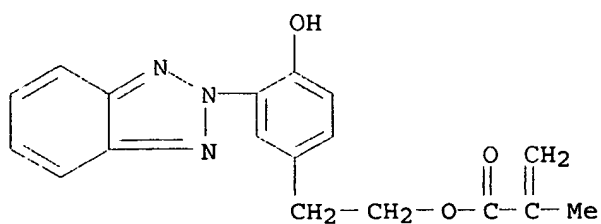
RN 247579-98-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidiny 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

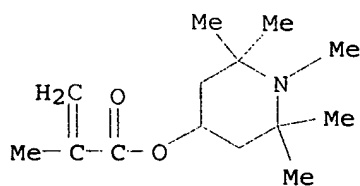
CMF C18 H17 N3 O3



CM 2

CRN 68548-08-3

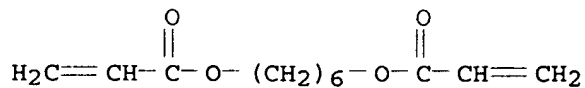
CMF C14 H25 N O2



CM 3

CRN 13048-33-4

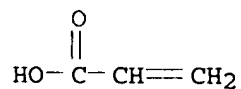
CMF C12 H18 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09C001-64

ICS C09C003-10; C09D005-38

CC 42-6 (Coatings, Inks, and Related Products)

ST discoloration prevention **UV absorber** light stabilizer coated aluminum pigment; weather resistance **UV absorber** light stabilizer coated aluminum pigment

IT Discoloration prevention
Light stabilizers
Pigments, nonbiological

UV stabilizers
 (UV absorber/light stabilizer-containing
 resin-coated and colored Al pigments for coatings with
 weather-resistant colors)

IT Acrylic polymers, uses
 (UV absorber/light stabilizer-containing
 resin-coated and colored Al pigments for coatings with
 weather-resistant colors)

IT 7429-90-5, Aluminum, uses
 (Alpaste 725N; UV absorber/light
 stabilizer-containing resin-coated and colored Al pigments for
 coatings with weather-resistant colors)

IT 247579-96-0P, Acrylic acid-2-(2'-hydroxy-5-
 methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-
 piperidyl methacrylate-trimethylolpropane trimethacrylate
 copolymer 247579-97-1P, Acrylic acid-1,6-hexanediol
 diacrylate-2-(2'-hydroxy-5-methacryloxyethylphenyl)-2H-
 benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate
 copolymer 247579-98-2P, Acrylic acid-1,6-hexanediol
 diacrylate-2-(2'-hydroxy-5-methacryloxyethylphenyl)-2H-
 benzotriazole-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate
 copolymer
 (UV absorber/light stabilizer-containing
 resin-coated and colored Al pigments for coatings with
 weather-resistant colors)

IT 147-14-8, Heliogen blue L 6900 84632-65-5, Irgazin DPP red BO
 130213-50-2, Colofine red 236A
 (UV absorber/light stabilizer-containing
 resin-coated and colored Al pigments for coatings with
 weather-resistant colors)

L38 ANSWER 36 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1999:267181 HCAPLUS
 DOCUMENT NUMBER: 130:353411
 TITLE: Scratch- and weather-resistant transparent
 multilayer films for safety glass
 INVENTOR(S): Tanaka, Yoshio; Mimura, Takashi
 PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 11115107	A2	19990427	JP 1997-296445	1997 1015

PRIORITY APPLN. INFO.: <--
 JP 1997-296445
 1997
 1015

AB Title films, useful for application onto an outdoor side of window
 glass, consist of a thermoplastic substrate and an UV-
 absorbing layer on ≥ 1 side of the substrate and
 satisfy surface pencil hardness of the UV-

absorbing side H or higher value. Thus, Lumirror T 60 (PET) film was coated with a composition containing 2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole (I)-Me methacrylate copolymer 95, Nikkacoat FS 12 (modified polyester) 4, and Cymel 370 (methylated melamine) 1 part, subsequently with a composition containing I 20, dipentaerythritol hexacrylate 68, Aronix M 7100 (acrylic oligomer) 8, and 2-hydroxypropyl acrylate 4 parts, exposed to UV irradiation at 300 mJ/cm², and coated with an adhesive on the back side to give a film showing haze 2.5% initially and 3.5% after 144-h weathering test and pencil hardness (JIS K 5400) 2H.

IT 223916-99-2P 223917-04-2P

(scratch- and weather-resistant transparent films having acrylic benzotriazole polymer layers for safety glass)

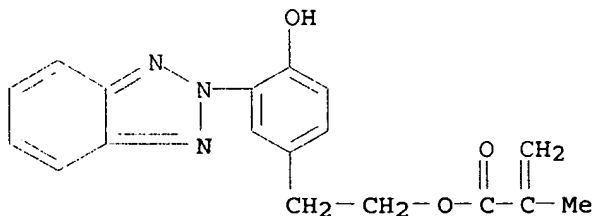
RN 223916-99-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with Aronix M 7100, 2-hydroxypropyl 2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

CMF C18 H17 N3 O3



CM 2

CRN 76723-57-4

CMF Unspecified

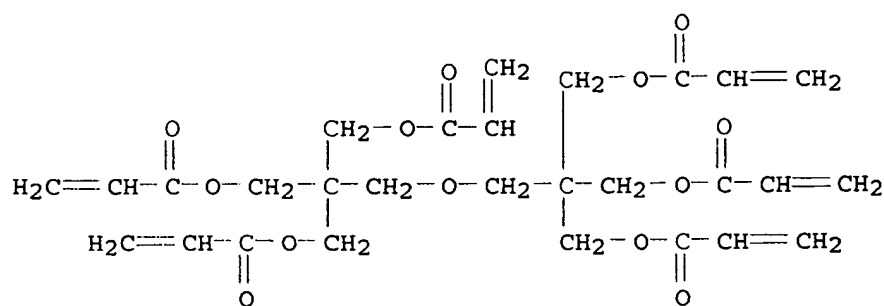
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

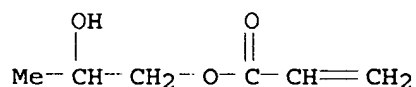
CRN 29570-58-9

CMF C28 H34 O13



CM 4

CRN 999-61-1
CMF C6 H10 O3

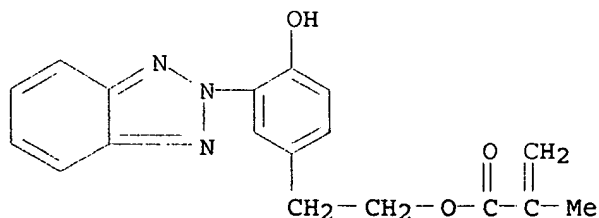


RN 223917-04-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with Aronix M 7100, 2-hydroxypropyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0
CMF C18 H17 N3 O3



CM 2

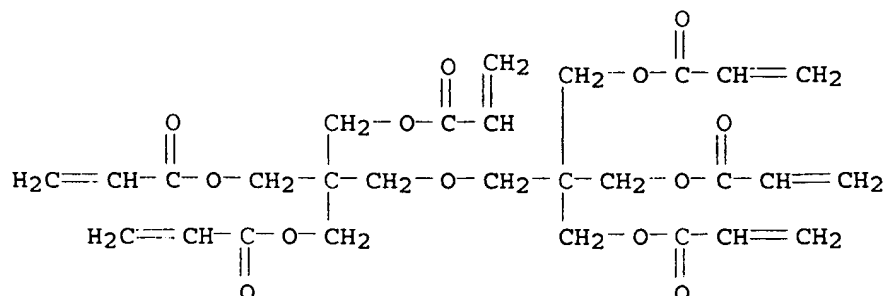
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CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 29570-58-9

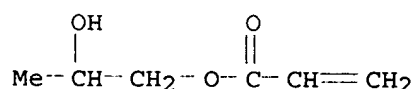
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CM 4

CRN 999-61-1

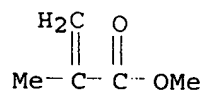
CMF C6 H10 O3



CM 5

CRN 80-62-6

CMF C5 H8 O2



IC ICM B32B027-18

ICS C03C017-32

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s) : 42

ST methacryloxy benzotriazole methacrylate copolymer transparent film; dipentaerythritol acrylate copolymer scratch resistant film; acrylic benzotriazole polymer weather resistant film; PET multilayer film safety window glass; **UV absorber** acrylic benzotriazole polymer film

IT 220463-40-1P 223916-99-2P 223917-04-2P
(scratch- and weather-resistant transparent films having acrylic benzotriazole polymer layers for safety glass)

L38 ANSWER 37 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:224457 HCAPLUS

DOCUMENT NUMBER: 130:283065

TITLE: Weather- and scratch-resistant thermoplastic

overlay films having good transparency and laminates therewith

INVENTOR(S): Tanaka, Iwao; Mimura, Takashi; Tanaka, Yoshio
 PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11091025	A2	19990406	JP 1997-256762	1997 0922

PRIORITY APPLN. INFO.: <-- JP 1997-256762 1997
0922

AB Title films have surface hard layers with pencil hardness \geq H and weather resistance on at least one side of thermoplastic film substrates. Thus, one side of a biaxially oriented poly(ethylene terephthalate) film was coated with PUVA 30M, cured at 120° for 2 min, further coated with a hard layer **composition** comprising pentaerythritol triacrylate 60, 2,2-bis(4-acryloxydiethoxyphenyl)propane 10, N-vinylpyrrolidone 30, and 2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole (reactive **UV absorbant**) 25 parts, and cured with UV to give a film having pencil hardness 2H. The film was laminated with a PVC film and further a steel plate to give a laminate having good weather and scratch resistance.

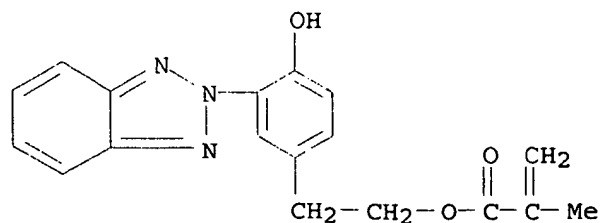
IT 222974-67-6P
 (hard layer coating **composition** for overlay film; preparation of weather- and scratch-resistant thermoplastic overlay films and their laminates)

RN 222974-67-6 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, 2-(hydroxymethyl)-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and (1-methylethylidene)bis(diethoxy-4,1-phenylene) di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

CMF C18 H17 N3 O3

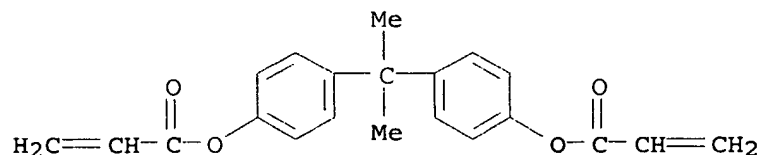


CM 2

CRN 83052-58-8

CMF C29 H36 O8

CCI IDS

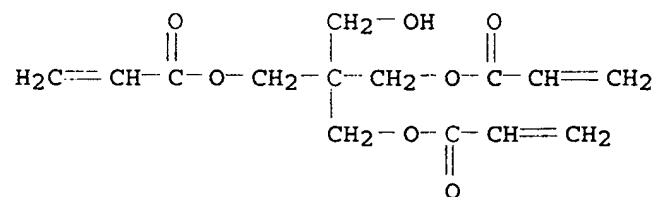


4 (D1-O-Et)

CM 3

CRN 3524-68-3

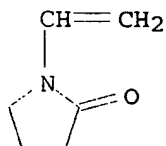
CMF C14 H18 O7



CM 4

CRN 88-12-0

CMF C6 H9 N O



IC ICM B32B007-02

ICS B32B015-08; B32B027-36; C08J007-04

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 55

ST weather scratch resistant thermoplastic overlay film; coating
 acrylic polymer reactive **UV absorbant**
 polyethylene terephthalate substrate; laminate PVC polyvinyl
 chloride steel overlay film

IT Acrylic polymers, uses

(coating **comps.** for overlay films; preparation of weather- and scratch-resistant thermoplastic overlay films and their laminates)

IT 222974-70-1P
(coating **composition** for overlay film; preparation of weather- and scratch-resistant thermoplastic overlay films and their laminates)

IT 153175-43-0, PUVA 30M
(coating **composition** for overlay film; preparation of weather- and scratch-resistant thermoplastic overlay films and their laminates)

IT 222974-67-6P
(hard layer coating **composition** for overlay film; preparation of weather- and scratch-resistant thermoplastic overlay films and their laminates)

L38 ANSWER 38 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:127076 HCAPLUS

DOCUMENT NUMBER: 130:200949

TITLE: Method of preparing foldable high refractive index acrylic ophthalmic device materials
Leboeuf, Albert R.; Karakelle, Mutlu

INVENTOR(S):

PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9908136	A1	19990218	WO 1998-US14419	1998 0714
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RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5891931	A	19990406	US 1997-908229	1997 0807
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AU 9883964	A1	19990301	AU 1998-83964	1998 0714
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AU 724873	B2	20001005		
EP 1002244	A1	20000524	EP 1998-934449	1998 0714
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EP 1002244	B1	20030226		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9811860	A	20000815	BR 1998-11860	1998 0714
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JP 2002511012 T2 20020409 JP 1999-512134 1998
0714

AT 233409 E 20030315 AT 1998-934449 1998
0714

PT 1002244 T 20030630 PT 1998-934449 1998
0714

ES 2191947 T3 20030916 ES 1998-934449 1998
0714

CA 2279452 C 20030923 CA 1998-2279452 1998
0714

CA 2279452 AA 19990218 <--
PRIORITY APPLN. INFO.: US 1997-908229 A 1997
0807

<--
WO 1998-US14419 W 1998
0714

<--

AB Foldable, acrylic, high refractive index ophthalmic device
materials containing a **UV absorbing** chromophore
are cured by exposure to blue light using a benzoylphosphine oxide
photoinitiator. The **compns.** of monomers such as
2-phenylethyl acrylate, N-vinylpyrrolidone and EGDMA cured well in
the presence of a benzoylphosphine oxide photoinitiator.

IT 186452-62-0P 220735-44-4P 220735-45-5P
220735-47-7P 220735-49-9P
(preparation of. foldable high refractive index acrylic ophthalmic
device materials)

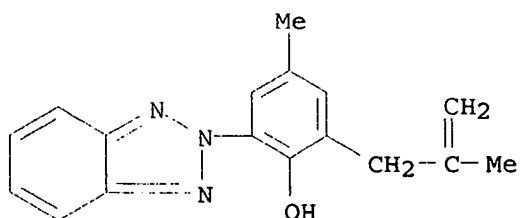
RN 186452-62-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with
2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol,
1,4-butanediyl di-2-propenoate and 2-phenylethyl 2-propenoate
(9CI) (CA INDEX NAME)

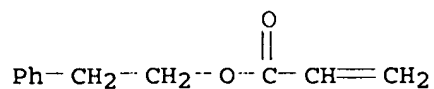
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CRN 98809-58-6

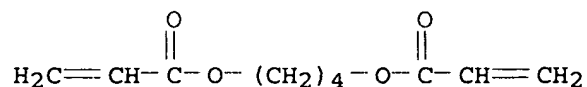
CMF C17 H17 N3 O



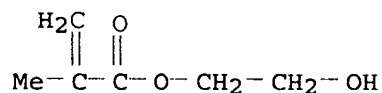
CM 2

CRN 3530-36-7
CMF C11 H12 O2

CM 3

CRN 1070-70-8
CMF C10 H14 O4

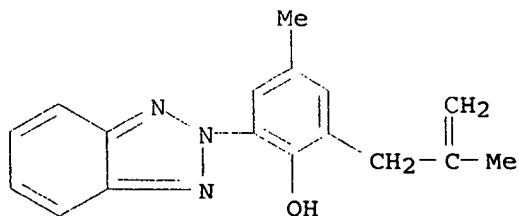
CM 4

CRN 868-77-9
CMF C6 H10 O3

RN 220735-44-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-phenylethyl ester, polymer with
2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol,
1,4-butanediyl di-2-propenoate and 2-phenylethyl 2-propenoate
(9CI) (CA INDEX NAME)

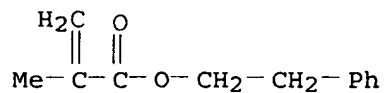
CM 1

CRN 98809-58-6
CMF C17 H17 N3 O

CM 2

CRN 3683-12-3

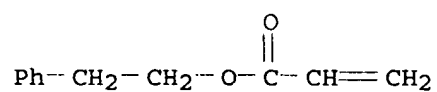
CMF C12 H14 O2



CM 3

CRN 3530-36-7

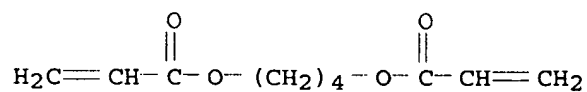
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CM 4

CRN 1070-70-8

CMF C10 H14 O4



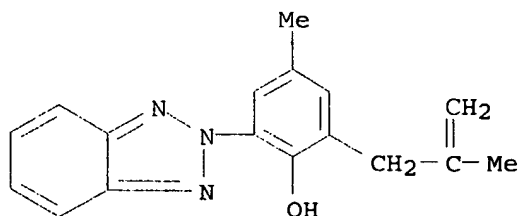
RN 220735-45-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
 2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol,
 hexyl 2-propenoate and 2-phenoxyethyl 2-propenoate (9CI) (CA
 INDEX NAME)

CM 1

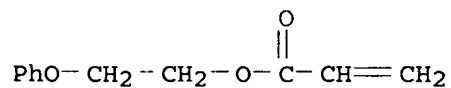
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CMF C17 H17 N3 O



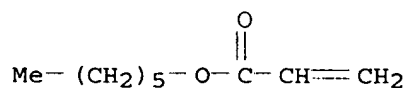
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CRN 48145-04-6
CMF C11 H12 O3



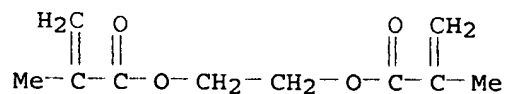
CM 3

CRN 2499-95-8
CMF C9 H16 O2



CM 4

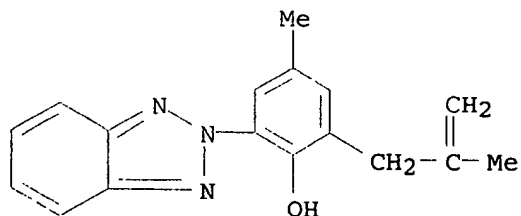
CRN 97-90-5
CMF C10 H14 O4



RN 220735-47-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol
and hexyl 2-propenoate (9CI) (CA INDEX NAME)

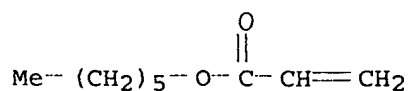
CM 1

CRN 98809-58-6
CMF C17 H17 N3 O



CM 2

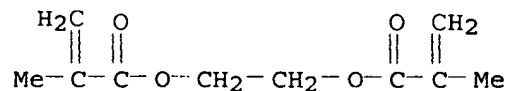
CRN 2499-95-8
CMF C9 H16 O2



CM 3

CRN 97-90-5

CMF C10 H14 O4



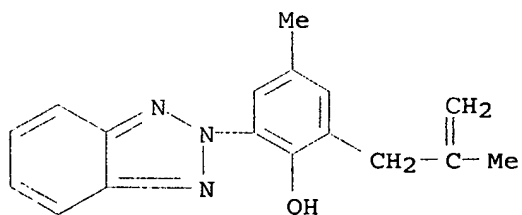
RN 220735-49-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
 2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol,
 1-ethenyl-2-pyrrolidinone, hexyl 2-propenoate and 2-phenoxyethyl
 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 98809-58-6

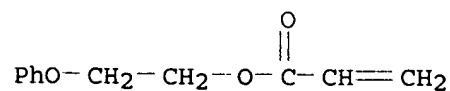
CMF C17 H17 N3 O



CM 2

CRN 48145-04-6

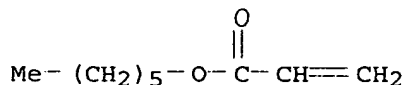
CMF C11 H12 O3



CM 3

CRN 2499-95-8

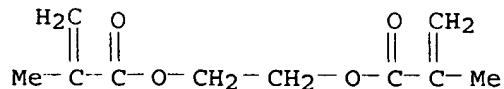
CMF C9 H16 O2



CM 4

CRN 97-90-5

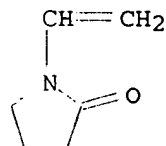
CMF C10 H14 O4



CM 5

CRN 88-12-0

CMF C6 H9 N O



IC ICM G02B001-04

ICS A61L027-00; C08F002-50; C08F020-18

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 37, 73

IT 79-10-7DP, Acrylic acid, esters, polymers 79-41-4DP, MethAcrylic acid, esters, polymers 937-41-7DP, Phenyl acrylate, polymers 2374-55-2DP, 4-Methylphenyl acrylate, polymers 2495-35-4DP, Benzyl acrylate, polymers 3530-36-7DP, 2-Phenylethyl acrylate, polymers 9003-39-8P, PVP 9003-53-6P 9011-14-7P, PMMA 21080-21-7DP, polymers 28825-60-7P, Poly(2-Phenylethyl methacrylate) 48145-04-6DP, 2-Phenoxyethyl acrylate, polymers 85909-41-7DP, 3-Phenylpropyl acrylate, polymers 88465-91-2DP, 4-Phenylbutyl acrylate, polymers 91990-21-5DP, 4-Methylbenzyl acrylate, polymers 95175-38-5DP, polymers 103969-85-3P, 4-Phenoxybutyl acrylate 120763-41-9P 146114-93-4P 157039-45-7P 157039-46-8P 158195-49-4DP, 3-Phenoxypropyl acrylate, polymers 186452-62-0P 220728-55-2P 220735-41-1DP, polymers 220735-42-2DP, polymers 220735-43-3DP, polymers 220735-44-4P 220735-45-5P 220735-47-7P 220735-49-9P (preparation of. foldable high refractive index acrylic ophthalmic device materials)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 39 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:113890 HCAPLUS

DOCUMENT NUMBER: 130:160660
 TITLE: Method and **composition** for producing
 activating light-absorbing lenses
 INVENTOR(S): Buazza, Omar M.; Luetke, Stephen C.; Powers,
 Galen R.
 PATENT ASSIGNEE(S): Q2100, Inc., USA
 SOURCE: PCT Int. Appl., 181 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: **Patent**
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9906887	A1	19990211	WO 1998-US15959	1998 0731
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CA 2297004	AA	19990211	CA 1998-2297004	1998 0731
<--				
AU 9887636	A1	19990222	AU 1998-87636	1998 0731
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AU 744949	B2	20020307		
EP 1000385	A1	20000517	EP 1998-939147	1998 0731
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EP 1000385	B1	20040428		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001512249	T2	20010821	JP 2000-505552	1998 0731
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AT 265700	E	20040515	AT 1998-939147	1998 0731
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US 6712596	B1	20040330	US 1999-395894	1999 0914
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US 6367928	B1	20020409	US 1999-398116	1999 0916

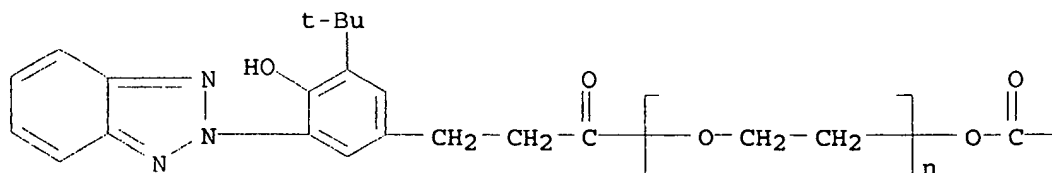
AB An eyeglass lens-forming **composition** containing light-absorbing compds. which may undergo light-initiated polymerization is provided. Typically, a lens-forming **composition** that absorbs light does not permit enough activating radiation to penetrate into the depths of the lens cavity to adequately initiate polymerization of the lens-forming **composition**. An embodiment of the invention provides a system and method for curing such a lens-forming **composition** to form a lens that does not transmit activating light. An activating light is used having a wavelength greater than the wavelengths of light which the light-absorbing compds. absorb. The power of the formed lenses may be controlled by varying the lens-forming conditions. Addnl., the lens-forming process may be controlled using a microprocessor-based control system.

IT 104810-47-1
(photopolymerizable **compns.** for eyeglass lens manufacture containing)

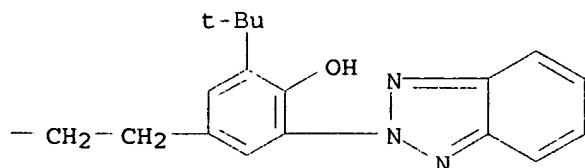
RN 104810-47-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- ω -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



- IC ICM G03F007-00
ICS G02B001-04; B29D011-00
- CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 9, 35, 73
- IT Eyeglasses
Lenses
(photopolymerizable **compns.** and method for manufacture of)
- IT 145052-34-2, CGI 819
(CGI 819; photopolymerizable **compns.** for eyeglass lens manufacture containing)
- IT 84000-75-9
(HiRi; photopolymerizable **compns.** for eyeglass lens manufacture containing)
- IT 947-19-3, 1-Hydroxycyclohexyl phenyl ketone
(Irgacure 184; photopolymerizable **compns.** for eyeglass lens manufacture containing)
- IT 6606-59-3
(SR 239; photopolymerizable **compns.** for eyeglass lens manufacture containing)
- IT 17831-71-9, Tetraethylene glycol diacrylate
(SR 268; photopolymerizable **compns.** for eyeglass lens manufacture containing)
- IT 15625-89-5, Trimethylolpropane triacrylate
(SR 351; photopolymerizable **compns.** for eyeglass lens manufacture containing)
- IT 164251-88-1, Thermoplast Red 454
(Thermoplast Red 454; photopolymerizable **compns.** for eyeglass lens manufacture containing)
- IT 61725-74-4, Zapon Brown 286
(Zapon Brown 286; photopolymerizable **compns.** for eyeglass lens manufacture containing)
- IT 71872-85-0, Zapon Brown 287
(Zapon Brown 287; photopolymerizable **compns.** for eyeglass lens manufacture containing)
- IT 7473-98-5, Darocur 1173 53814-24-7, CN 104 60506-81-2, Dipentaerythritol pentaacrylate 64401-02-1
(eyeglasses with scratch-resistant coatings produced from photopolymerizable **compns.** containing)
- IT 86-39-5, 2-Chlorothioxanthone 90-47-1, Xanthone 94-36-0, Benzoyl peroxide, uses 99-97-8, N,N-Dimethyl-p-toluidine 100-10-7, p-Dimethylaminobenzaldehyde 102-71-6, Triethanolamine, uses 108-32-7, Propylene carbonate 118-55-8, Phenyl salicylate 119-61-9, Benzophenone, uses 123-31-9, 1,4-Benzenediol, uses 131-57-7, 2-Hydroxy-4-methoxybenzophenone 134-84-9, 4-Methylbenzophenone 492-22-8, Thioxanthone 611-73-4 954-16-5, 2,4,6-Trimethylbenzophenone 1680-21-3, Triethylene glycol diacrylate 2082-79-3 2440-22-4 3147-75-9 4702-90-3, Thermoplast Yellow 104 5232-99-5, Ethyl-2-cyano-3,3-diphenyl

acrylate 5495-84-1, 2-Isopropylthioxanthone 6175-45-7,
 2,2-Diethoxyacetophenone 10287-53-3, Ethyl 4-
 dimethylaminobenzoate 15206-55-0, Methylbenzoyl formate
 15774-82-0, 2-Methylthioxanthone 24650-42-8 41484-35-9
 41556-26-7, Tinuvin 292 44798-79-0, N,N-Dimethyldiethanolamine
 55426-74-9, Ethyl 2-dimethylaminobenzoate 58817-05-3, Octyl
 p-dimethylaminobenzoate 66231-33-2, Oil Soluble Blue II
 67362-76-9, Butoxyethyl 4-dimethylaminobenzoate 71868-10-5
 75980-60-8 98954-36-0 104810-47-1 104810-48-2
 119313-12-1 125051-32-3 178905-31-2 178905-32-3
 192662-79-6, Tinuvin 400 204528-73-4, CN-386 211688-19-6,
 CN-384 220286-80-6, Zapon Green 936 220286-97-5, PRO 629
 220287-01-4, Thermoplast Blue P
 (photopolymerizable **compns.** for eyeglass lens manufacture
 containing)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L38 ANSWER 40 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:97324 HCAPLUS

DOCUMENT NUMBER: 130:197677

TITLE: Colored sheets for surface protection and
 manufacture of moldings with high surface
 hardness using them

INVENTOR(S): Nakamura, Yuzo

PATENT ASSIGNEE(S): Nissha Printing Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11034248	A2	19990209	JP 1997-210107	1997 0717

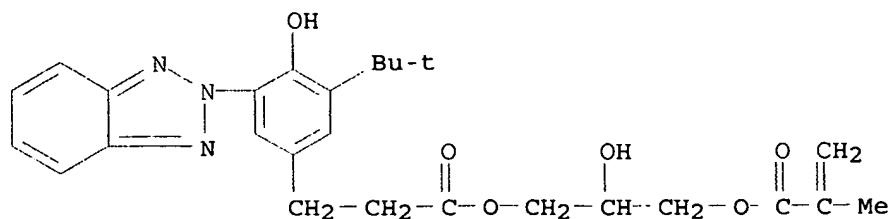
PRIORITY APPLN. INFO.: <--
 JP 1997-210107

1997
0717

AB Title protective sheets comprise colored film substrates coated
 with protective layers obtained from thermally crosslinked
 products of heat- and active energy ray-curable polymer
compns. containing polymers with (meth)acrylic equivalent weight
 100-300 g/equiv, OH value 20-500, and weight-average mol. weight
 5000-50,000, and polyfunctional isocyanates as crosslinkers. The
 moldings are prepared by steps of: (1) setting the protective sheets
 in a mold, (2) injecting polymers into the mold cavity, (3)
 molding the polymers together with the protective sheets, and (4)
 irradiating with active energy ray. The moldings can also be
 prepared by applying the protective sheets on a molding surface,
 heating to soften the sheets, and affixing them to molding surface
 by vacuum. Thus, a C black-containing polycarbonate protective sheet
 having a layer obtained from Coronate HX (HDI trimer) and glycidyl
 methacrylate-Me methacrylate copolymer acrylate, when

injection-molded with an acrylic resin, gave a molding having surface with good resistance to abrasion, crack and chemical

IT 135590-53-3
(UV absorbers; colored sheets for protection of molding surface from scratch and chems.)
RN 135590-53-3 HCAPLUS
CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)



IC ICM B32B027-30
ICS C09D175-16; B29C045-14; C09D004-02; C09D133-14
CC 38-3 (Plastics Fabrication and Uses)
IT 135590-53-3 178905-31-2
(UV absorbers; colored sheets for protection of molding surface from scratch and chems.)

L38 ANSWER 41 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:724043 HCAPLUS

DOCUMENT NUMBER: 130:39553

TITLE: Transfer materials, surface protective sheets, and light-, abrasion- and chemical-resistant moldings using them

INVENTOR(S): Nakamura, Yuzo

PATENT ASSIGNEE(S): Nissha Printing Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

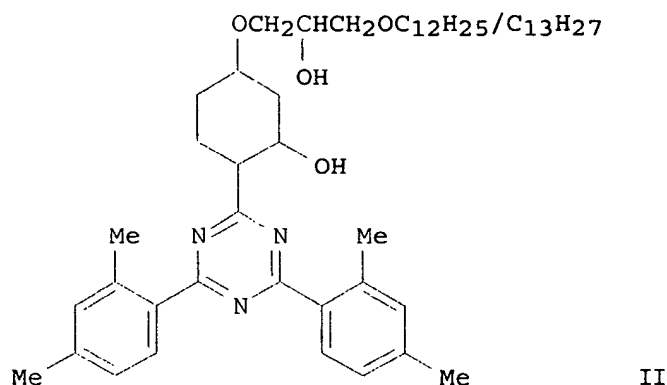
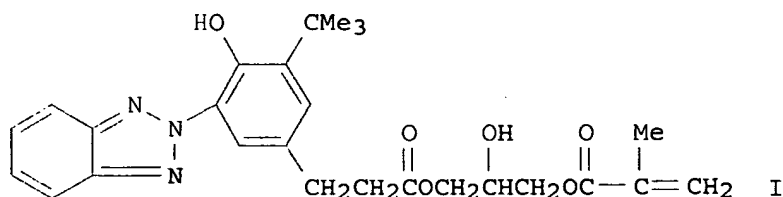
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10297185	A2	19981110	JP 1997-125103	1997 0428

PRIORITY APPLN. INFO.:

JP 1997-125103

1997
0428

GI



AB The transfer materials have on 1 side of a releasable substrate sheet a protective layer comprising thermally cured products from active energy ray-curable **compns.** containing polyisocyanates and polymers [(meth)acrylic equiv 100-300 g/equiv, OH value 20-500, and weight-average mol. weight 5000-50,000] and containing compound I or

comps. II as UV absorbers. The surface-protective sheets have the protective layer on 1 side and an adhesive layer on the other side of a nonreleasable substrate sheet. The title moldings are manufactured by attaching the transfer materials to the surfaces of moldings, removing the substrate sheets, and irradiating the moldings with active energy rays. Alternatively, the moldings are manufactured by placing the surface protective sheets over the surfaces of moldings, softening the substrate sheets under heat, attaching them on the molding surfaces by vacuum suction, and irradiating them with active energy rays. Thus, a polyester film was successively coated with a release agent, a protective layer from a **composition** containing 1,6-hexane diisocyanate trimer (Coronate HX), I, and a varnish containing glycidyl methacrylate-Me methacrylate copolymer and acrylic acid, an anchor coating layer, printed layer, and an acrylic adhesive layer to give a transfer material. The material was transferred onto an acrylic resin article and irradiated with UV after removing the substrate to give a tray showing high abrasion resistance, and yellowing resistance after 80-h exposure to UV rays at 75°.

IT 216854-00-1P

(transfer sheets having protective layers containing **UV absorbers** for light-, abrasion- and chemical-resistant moldings)

RN 216854-00-1 HCAPLUS

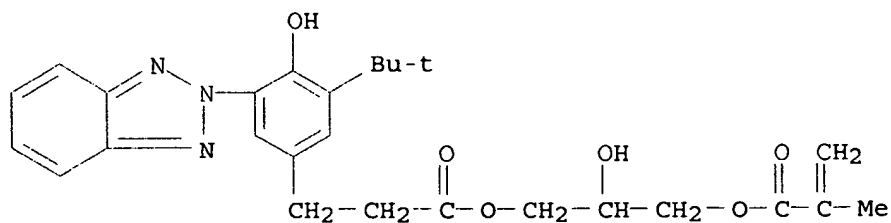
CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-

propenyl)oxy]propyl ester, polymer with 1,6-diisocyanatohexane
 trimer, methyl 2-methyl-2-propenoate, oxiranylmethyl
 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 135590-53-3

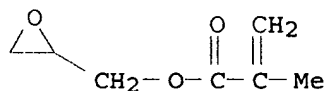
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CRN 106-91-2

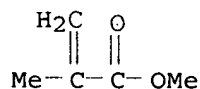
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CRN 80-62-6

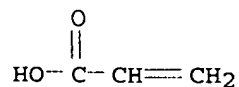
CMF C5 H8 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



CM 5

CRN 28574-90-5

CMF (C8 H12 N2 O2)3

CCI PMS

CM 6

CRN 822-06-0

CMF C8 H12 N2 O2

OCN--(CH₂)₆-NCO

IT 216853-99-5P

(transfer sheets having protective layers containing UV
absorbers for light-, abrasion- and chemical-resistant
moldings)

RN 216853-99-5 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-
dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-
propenyl)oxy]propyl ester, polymer with Coronate HX, methyl
2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and
2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 144245-98-7

CMF Unspecified

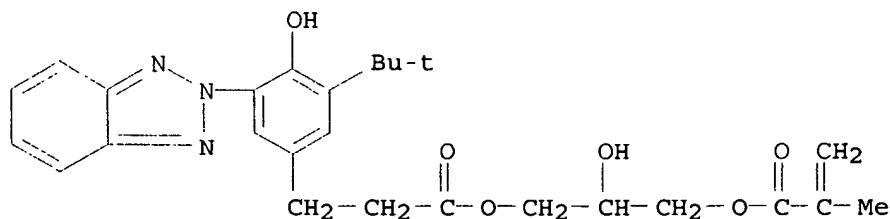
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CRN 135590-53-3

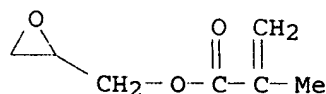
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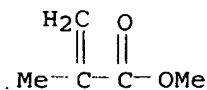
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CRN 106-91-2

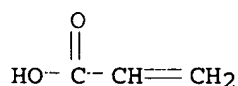
CMF C7 H10 O3



CM 4

CRN 80-62-6
CMF C5 H8 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

- IC ICM B44C001-165
ICS B32B027-00
- CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 42, 74
- ST polyisocyanate crosslinked acrylate polymer transfer; methacrylate polymer polyisocyanate crosslinked transfer; hydroxyphenylbenzotriazole **UV absorber** surface protective sheet; hydroxyphenyltriazine **UV absorber** surface protective sheet; light resistance sheet polyisocyanate crosslinked polyacrylate; abrasion resistance sheet polyisocyanate crosslinked polyacrylate; chem resistance sheet polyisocyanate crosslinked polyacrylate
- IT Coating materials
Coating materials
(light-resistant; transfer sheets having protective layers containing **UV absorbers** for light-, abrasion- and chemical-resistant moldings)
- IT Abrasion-resistant materials
Chemically resistant materials
Crosslinking
Light-resistant materials
Plates
Transfers
UV stabilizers
(transfer sheets having protective layers containing **UV absorbers** for light-, abrasion- and chemical-resistant moldings)
- IT 216853-97-3 216853-98-4
(UV stabilizers; transfer sheets having protective layers containing **UV absorbers** for light-, abrasion- and chemical-resistant moldings)
- IT 135590-53-3
(UV stabilizers; transfer sheets having protective layers containing **UV absorbers** for light-, abrasion- and chemical-resistant moldings)
- IT 216854-00-1P
(transfer sheets having protective layers containing **UV**

IT 204701-37-1P 204701-64-4P 216853-99-5P
(transfer sheets having protective layers containing UV
absorbers for light-, abrasion- and chemical-resistant
moldings)

PATENT INFORMATION:

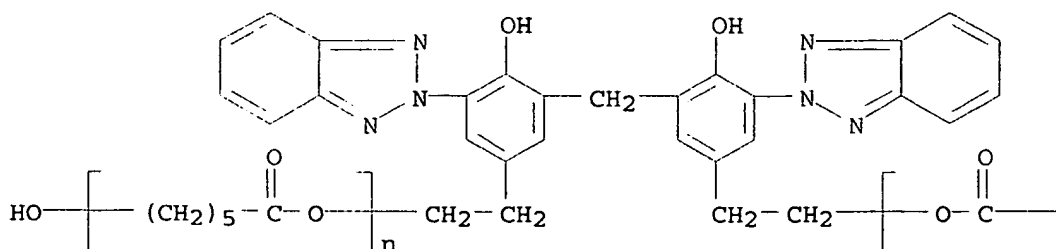
PRIORITY APPLN. INFO.:

IT 214746-68-6P

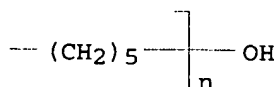
CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-

ethanediyl]]bis[ω-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



- IC ICM C08G063-08
ICS C08G063-685; C09K003-00; C07D249-20
CC 37-6 (Plastics Manufacture and Processing)
ST **UV absorbing** polyester methylenebis
benzotriazolylhydroxyphenylethyl polycaprolactone; weather
resistance polypropylene benzotriazolylhydroxyphenylethyl
polycaprolactone blend
IT UV stabilizers
(methylenebis[(bentotriazolylhydroxyphenyl)ethyl] group-containing
polyester **UV absorbers** for resin
compns.)
IT Acrylic polymers, properties
Polyamides, properties
Polycarbonates, properties
Polyesters, properties
Polyolefins
(methylenebis[(bentotriazolylhydroxyphenyl)ethyl] group-containing
polyester **UV absorbers** for resin
compns.)
IT Polyurethanes, properties
(thermoplastic; methylenebis[(bentotriazolylhydroxyphenyl)ethyl
] group-containing polyester **UV absorbers** for
resin **compns.**)
IT **214746-68-6P** 215232-60-3P
(methylenebis[(bentotriazolylhydroxyphenyl)ethyl] group-containing
polyester **UV absorbers** for resin
compns.)
IT 9002-85-1, Poly(vinylidene chloride) 9002-86-2, Poly(vinyl
chloride) 9003-07-0, Polypropylene 9003-53-6, Polystyrene
9003-56-9, Acrylonitrile-butadiene-styrene copolymer 9011-14-7,

PMMA 25038-59-9, Poly(ethylene terephthalate), properties
(methylenebis[(bentotriazolylhydroxyphenyl)ethyl] group-containing
polyester **UV absorbers** for resin
compns.)

L38 ANSWER 43 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:146966 HCAPLUS

DOCUMENT NUMBER: 128:245252

TITLE: Scratch- and weather-resistant UV-curable
coating **compositions** for plastics

INVENTOR(S): Higuchi, Toshihiko; Kondo, Satoshi; Yamamoto,
Hirotugu

PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 10060307	A2	19980303	JP 1996-225535	1996 0827

PRIORITY APPLN. INFO.:

<--
JP 1996-225535

1996
0827

AB The **compns.** contain 100 parts UV-curable monomers containing
≥20% monomers bearing ≥2 (meth)acryloyl group per
mol., 0.1-20 parts **UV absorbers** containing
benzophenone or benzotriazole derivs. bearing (meth)acryloyl
groups, and 0.1-20 parts photoinitiators. Thus, irradiation of 100
parts dipentaerythritol hexaacrylate and 5 parts
2-[2-hydroxy-5-(2-acryloyloxyethyl)phenyl]benzotriazole in the
presence of photoinitiator by UV gave coatings showing good
appearance, scratch and weather resistance.

IT 204849-33-2P 204849-35-4P

(scratch- and weather-resistant UV-curable coating
compns. for plastics)

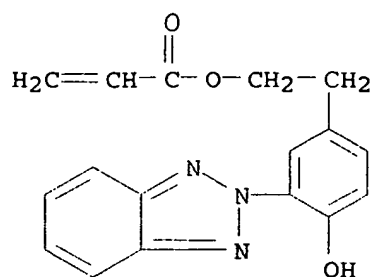
RN 204849-33-2 HCAPLUS

CN 2-Propenoic acid, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-
propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-
propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with
2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate
(9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2

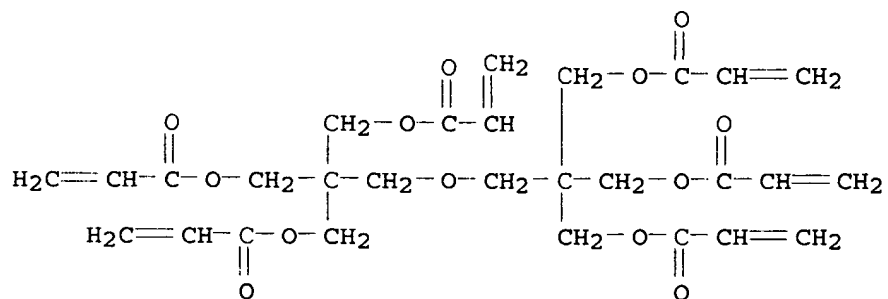
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CM 2

CRN 29570-58-9

CMF C28 H34 O13



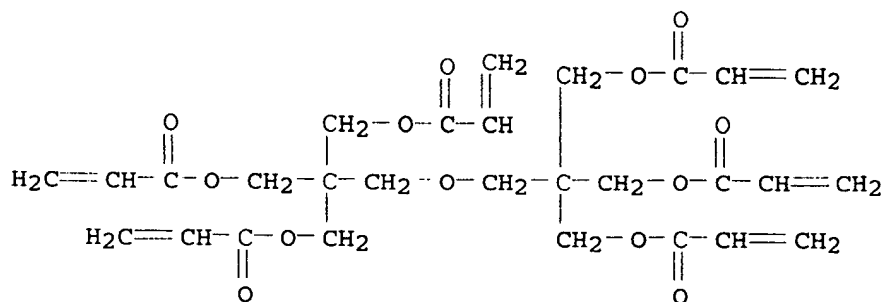
RN 204849-35-4 HCAPLUS

CN 2-Propenoic acid, 2-[[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)phenol (9CI) (CA INDEX NAME)

CM 1

CRN 29570-58-9

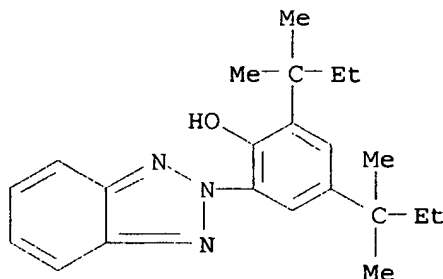
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CM 2

CRN 25973-55-1

CMF C22 H29 N3 O



IC ICM C09D004-02

CC 42-10 (Coatings, Inks, and Related Products)

IT Coating materials

(UV-curable; scratch- and weather-resistant UV-curable coating compns. for plastics)

IT Polyurethanes, uses

(acrylates, polymers; scratch- and weather-resistant UV-curable coating compns. for plastics)

IT UV stabilizers

(polymerizable; scratch- and weather-resistant UV-curable coating compns. for plastics)

IT 126-58-9DP, Dipentaerythritol, acrylates, reaction products with hexamethylene diisocyanate, polymers 818-61-1DP, 2-Hydroxyethyl acrylate, reaction products with ethoxylated bisphenol A-hexamethylene diisocyanate copolymer, polymers 822-06-0DP, Hexamethylene diisocyanate, reaction products with dipentaerythritol acrylates, polymers 16432-81-8DP, polymers with polyurethane acrylates 25973-55-1DP, polymers with polyurethane acrylates 138455-55-7DP, acrylates, polymers 170103-27-2DP, polymers with polyurethane acrylates 204849-33-2P 204849-34-3P 204849-35-4P (scratch- and weather-resistant UV-curable coating compns. for plastics)

L38 ANSWER 44 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:87716 HCAPLUS

DOCUMENT NUMBER: 128:154827

TITLE: Polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivatives as **UV absorbers**

INVENTOR(S): Toan, Vien Van; Valet, Andreas; Hayoz, Pascal

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.;

Toan, Vien Van; Valet, Andreas; Hayoz, Pascal

SOURCE: PCT Int. Appl., 152 pp.

CODEN: PIXXD2

DOCUMENT TYPE: **Patent**

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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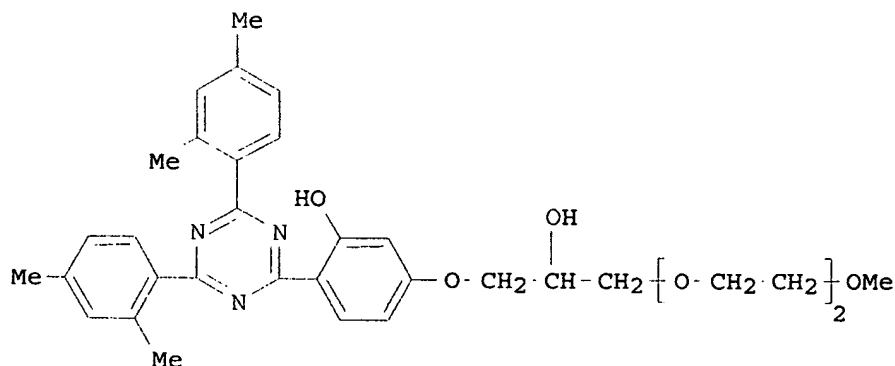
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    SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ,
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US 2002094320       A1      20020718      US 2001-6634
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US 6653484          B2      20031125

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PRIORITY APPLN. INFO.:

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EP 1997-932777	A3	1997 0707
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WO 1997-EP3567	W	1997 0707
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US 1999-214859	B3	1999 0113
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US 2000-679231	A3	2000 1004
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OTHER SOURCE(S): MARPAT 128:154827
GI



AB Triazine, benzotriazole and benzophenone derivs. which are substituted or bridged with polyoxyalkylene groups, according to claim 1, and their use as **UV absorbers**, especially in photog. materials, in inks, including ink-jet inks and printing inks, in transfer prints, in paints and varnishes, organic polymeric materials, plastics, rubber, glass, packaging materials, in sunscreens of cosmetic prepns. and in skin protection compns. are disclosed. Diethylene glycol Me glycidyl ether was treated with 2,4-bis(2,4-dimethylphenyl)-6-(2,4-dihydroxyphenyl)-s-triazine to give I.

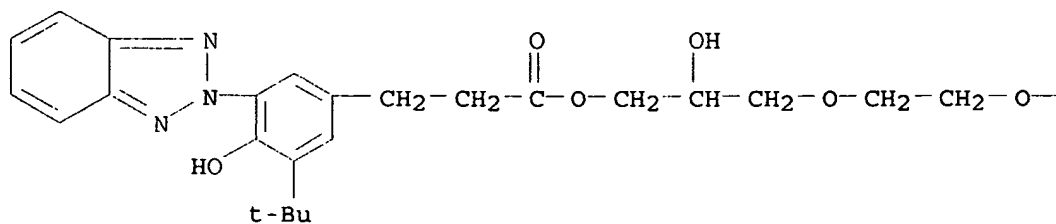
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202412-37-1P 202412-38-2P 202412-39-3P
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(polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as **UV absorbers**)

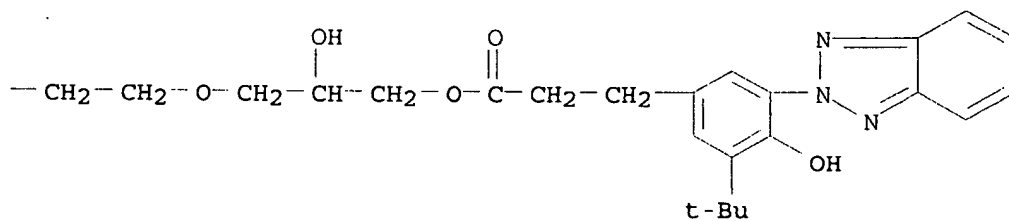
RN 202412-34-8 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, oxybis[2,1-ethanediyoxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



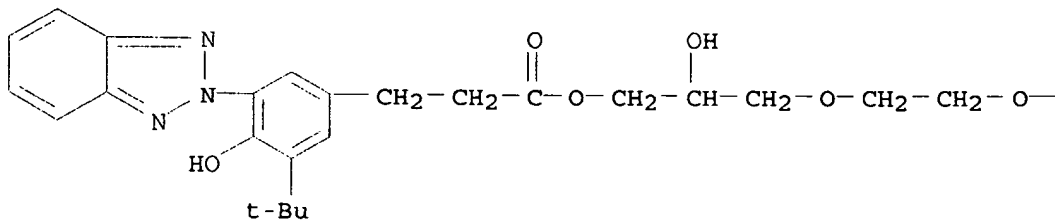
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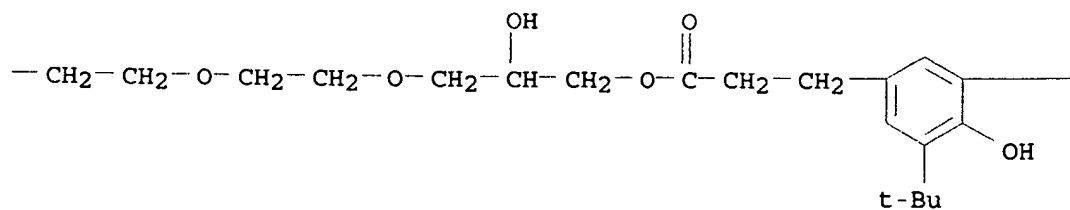
RN 202412-35-9 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2,15-dihydroxy-4,17,10,13-tetraoxahexadecane-1,16-diyl ester (9CI) (CA INDEX NAME)

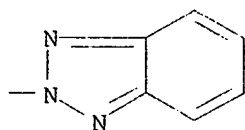
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PAGE 1-B



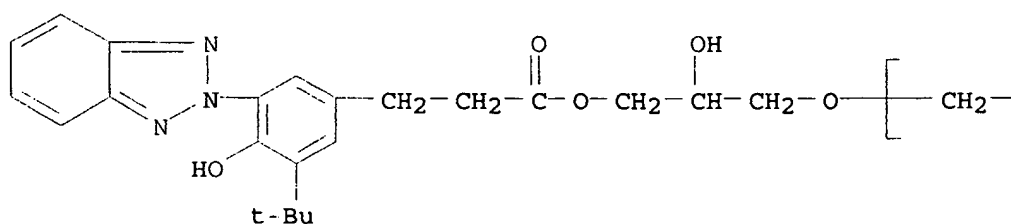
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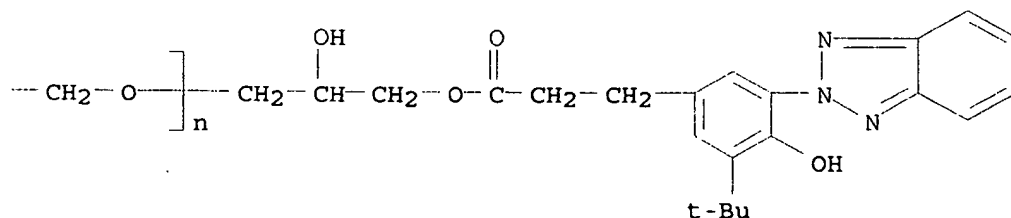
RN 202412-36-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-2-hydroxypropyl]- ω -[3-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-2-hydroxypropoxy]-(9CI) (CA INDEX NAME)

PAGE 1-A



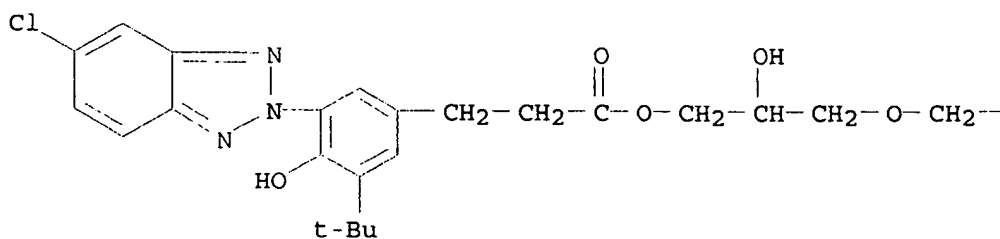
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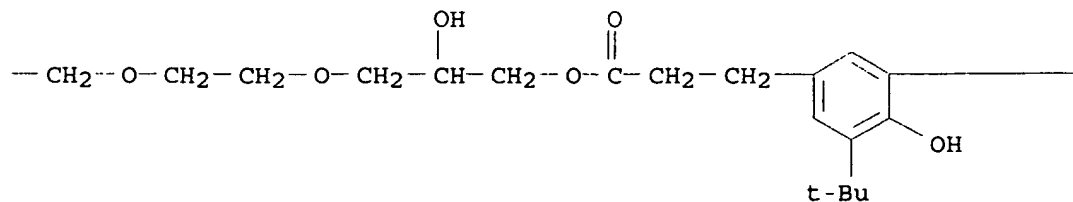
RN 202412-37-1 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, oxybis[2,1-ethanediyl]oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

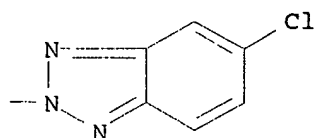
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PAGE 1-B

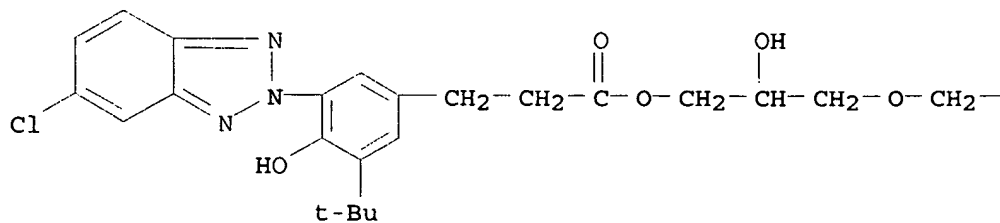


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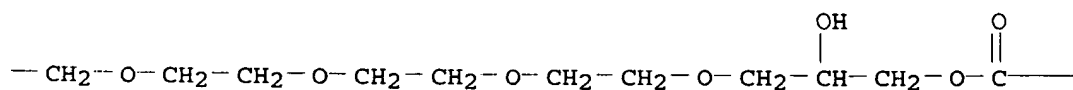


RN 202412-38-2 HCAPLUS
 CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2,18-dihydroxy-4,7,10,13,16-pentaoxanonadecane-1,19-diyl ester (9CI) (CA INDEX NAME)

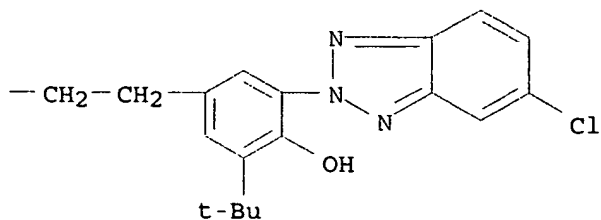
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PAGE 1-B



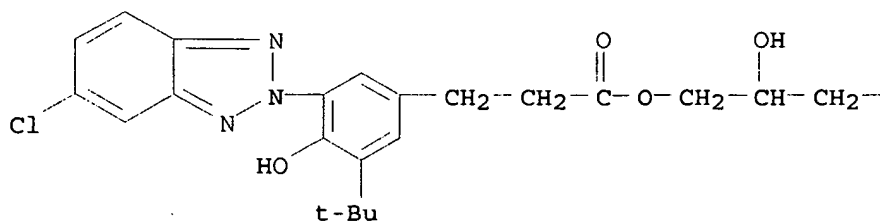
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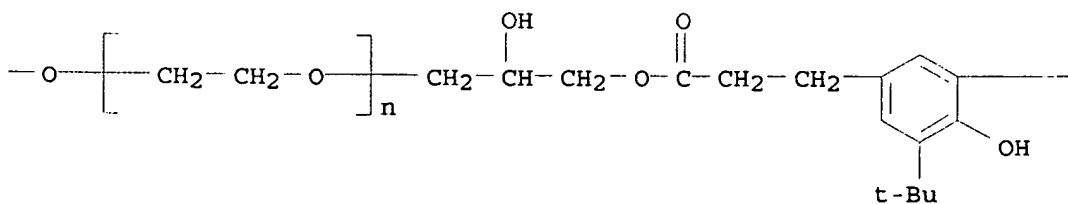
RN 202412-39-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[3-[3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-2-hydroxypropyl]- ω -[3-[3-[3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-2-hydroxypropoxy]-(9CI) (CA INDEX NAME)

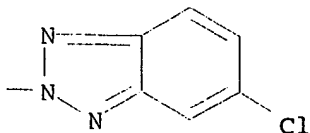
PAGE 1-A



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PAGE 1-C

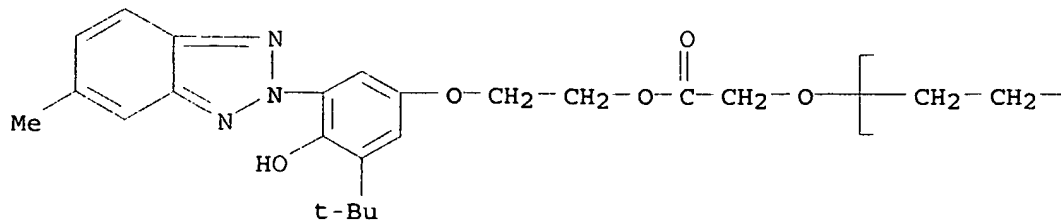


RN 202412-40-6 HCAPLUS

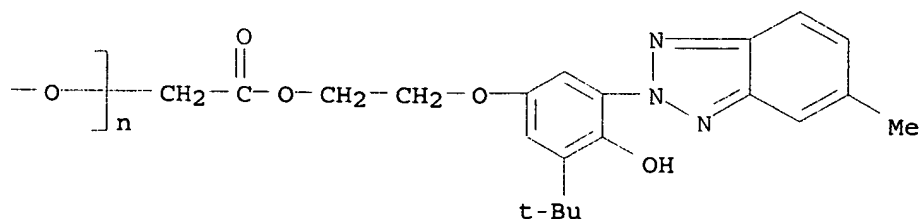
CN Poly(oxy-1,2-ethanediyl), α -[2-[2-[3-(1,1-dimethylethyl)-4-hydroxy-5-(5-methyl-2H-benzotriazol-2-yl)phenoxy]ethoxy]-2-

oxoethyl]-ω-[2-[2-[3-(1,1-dimethylethyl)-4-hydroxy-5-(5-methyl-2H-benzotriazol-2-yl)phenoxy]ethoxy]-2-oxoethoxy]- (9CI)
(CA INDEX NAME)

PAGE 1-A

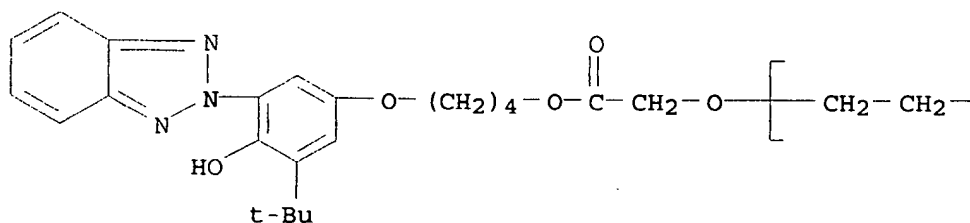


PAGE 1-B

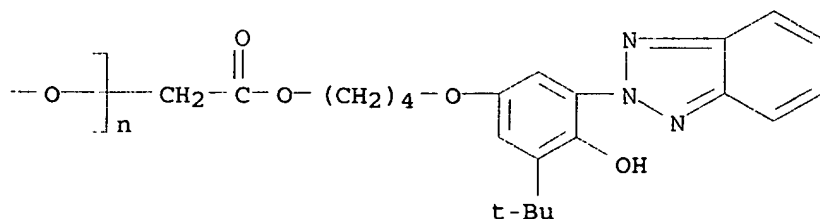


RN 202412-43-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-[2-[4-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenoxy]butoxy]-2-oxoethyl]-ω-[2-[4-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenoxy]butoxy]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



- IC ICM C07D251-24
ICS C08K005-34; C07D249-20; C07C049-84
- CC 37-2 (Plastics Manufacture and Processing)
Section cross-reference(s): 28, 38, 42, 63
- ST light stabilizer polyoxyalkylene triazine; benzotriazole
polyoxyalkylene light stabilizer; benzophenone polyoxyalkylene
light stabilizer; coating light stabilizer; polymer light
stabilizer; plastic light stabilizer; rubber light stabilizer;
glass **UV absorber**; packaging material light
stabilizer; cosmetic light stabilizer
- IT Coating materials
(light-resistant; polyoxyalkene substituted and bridged
triazine, benzotriazole and benzophenone derivs. as **UV
absorbers**)
- IT Cosmetics
Light stabilizers
Packaging materials
(polyoxyalkene substituted and bridged triazine, benzotriazole
and benzophenone derivs. as **UV absorbers**)
- IT Polyurethanes, preparation
(polyoxyalkene substituted and bridged triazine, benzotriazole
and benzophenone derivs. as **UV absorbers**)
- IT Polymers, uses
(polyoxyalkene substituted and bridged triazine, benzotriazole
and benzophenone derivs. as **UV absorbers**)
- IT 83713-01-3, Jeffamine M-2070
(Jeffamine M 600; polyoxyalkene substituted and bridged
triazine, benzotriazole and benzophenone derivs. as **UV
absorbers**)
- IT 929-59-9P 202411-78-7P 202411-79-8P 202411-80-1P
202411-81-2P 202411-82-3P 202411-83-4P 202411-84-5P
202411-85-6P 202411-86-7P 202411-87-8P 202411-88-9P
202411-89-0P 202411-90-3P 202411-91-4P 202411-92-5P
202411-93-6P 202411-94-7P 202411-95-8P 202411-97-0P
202411-98-1P 202411-99-2P 202412-00-8P 202412-01-9P
202412-02-0P 202412-04-2P 202412-06-4P 202412-10-0P
202412-11-1P 202412-12-2P 202412-13-3P 202412-14-4P
202412-15-5P 202412-16-6P 202412-17-7P 202412-18-8P
202412-19-9P 202412-20-2P 202412-21-3P 202412-22-4P
202412-23-5P 202412-24-6P 202412-25-7P 202412-26-8P
202412-27-9P 202412-28-0P 202412-29-1P 202412-30-4P
202412-31-5P 202412-32-6P 202412-33-7P 202412-34-8P
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202412-38-2P 202412-39-3P 202412-40-6P
202412-41-7P 202412-42-8P 202412-43-9P 202412-44-0P
202412-45-1P 202412-48-4P 202412-49-5P 202412-50-8P
202483-41-8P 202483-42-9P 202483-43-0P 202533-62-8P

202533-65-1P 202533-68-4P 202533-70-8P

(polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

IT 189751-54-0P

(polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

IT 1954-28-5P, Triethylene glycol diglycidyl ether 4206-61-5P,
 Diethylene glycol diglycidyl ether 14435-45-1P 17626-93-6P,
 Tetraethylene glycol diglycidyl ether 26403-72-5P 26951-52-0P,
 Polytetramethylene glycol diglycidyl ether 28607-80-9P
 35625-91-3P 40349-67-5P 50522-30-0P 71712-93-1P
 73692-54-3P 87257-02-1P

(polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

IT 41556-26-7

(polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

IT 106-89-8, reactions 111-77-3 111-90-0 112-35-6 112-50-5
 131-56-6, 2,4-Dihydroxybenzophenone 143-22-6 1668-53-7
 9004-74-4 9004-77-7 9046-10-0 22607-31-4 24979-97-3
 38369-95-8 39927-08-7, Polyethylene glycol bis(carboxymethyl)
 ether 84268-33-7 84268-36-0 143451-01-8 200410-65-7
 200410-81-7 202411-96-9 202412-08-6 202412-46-2
 202412-47-3

(polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

REFERENCE COUNT:

8

THERE ARE 8 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L38 ANSWER 45 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:664091 HCAPLUS

DOCUMENT NUMBER: 127:347366

TITLE: Laminated plastic films for green houses

INVENTOR(S): Tanaka, Yoshio; Mimura, Hisashi

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09262939	A2	19971007	JP 1996-72804	1996 0327

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PRIORITY APPLN. INFO.:

JP 1996-72804

1996
0327

<--

AB The laminate comprises a thermoplastic film having a surface hardening layer (pencil hardness H or harder) containing UV-absorbing substances and a hydrophobically treated layer (water contact angle $\leq 60^\circ$) on the other surface. The films show high weather resistance, transparency, scratch resistance, and anticlouding property. Lumirror T 90 (a PET film)

was coated with a **composition** containing dipentaerythritol hexaacrylate 70, N-vinylpyrrolidone 30, 1-hydroxycyclohexyl Ph ketone 4, and 2-(2-hydroxy-5-methacryloxyethylphenyl)-2H-benzotriazole 35 parts, cured by UV irradiation, coated on the other side with a **composition** containing 25/10/15/45/5 (mol%) terephthalic acid-isophthalic acid-Na 5-sulfoisophthalate-ethylene glycol-diethylene glycol copolymer, and dried to give a laminate showing initial haze 3.1%, haze after a weathering test 3.8%, pencil hardness 3H, and water contact angle 48°.

IT 198084-21-8P

(transparent and anticlouding laminated plastic films containing benzotriazole-based **UV absorbers** for greenhouses)

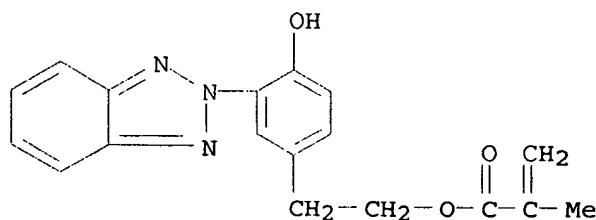
RN 198084-21-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

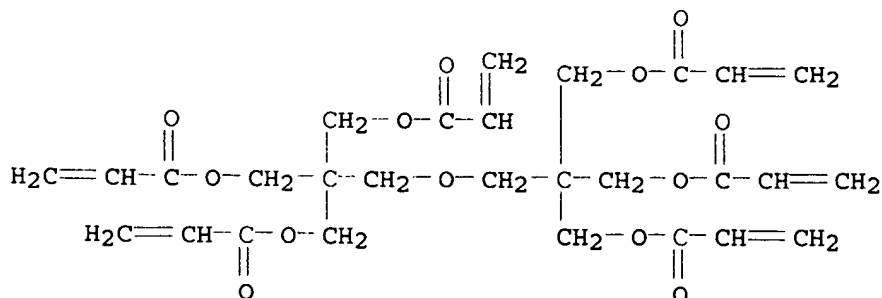
CMF C18 H17 N3 O3



CM 2

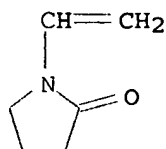
CRN 29570-58-9

CMF C28 H34 O13



CM 3

CRN 88-12-0
CMF C6 H9 N O



- IC ICM B32B027-00
ICS B32B027-18; B32B027-30; B32B027-36
- CC 38-3 (Plastics Fabrication and Uses)
- ST greenhouse laminated film polyester acrylic polymer; benzotriazole
UV absorber laminated plastic greenhouse;
weather resistance benzotriazole plastic film greenhouse;
transparency laminated polyester polyacrylate film greenhouse;
anticloding laminated polyester polyacrylate film greenhouse;
scratch resistance greenhouse laminated plastic film
- IT Polyesters, properties
(Lumirror T 90; transparent and anticloding laminated plastic
films containing benzotriazole-based **UV absorbers**
for greenhouses)
- IT Greenhouses
Laminated plastic films
Transparent films
UV stabilizers
(transparent and anticloding laminated plastic films containing
benzotriazole-based **UV absorbers** for
greenhouses)
- IT Laminated plastics, properties
Polyesters, properties
(transparent and anticloding laminated plastic films containing
benzotriazole-based **UV absorbers** for
greenhouses)
- IT 25038-59-9, Poly(ethylene terephthalate), properties
(Lumirror T 90; transparent and anticloding laminated plastic
films containing benzotriazole-based **UV absorbers**
for greenhouses)
- IT 153175-43-0P 198084-21-8P
(transparent and anticloding laminated plastic films containing
benzotriazole-based **UV absorbers** for
greenhouses)
- IT 81723-69-5, Ethylene glycol-diethylene glycol-isophthalic
acid-sodium 5-sulfoisophthalate-terephthalic acid copolymer
(transparent and anticloding laminated plastic films containing
benzotriazole-based **UV absorbers** for
greenhouses)

L38 ANSWER 46 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:231596 HCAPLUS
DOCUMENT NUMBER: 124:291310
TITLE: Poly(phenylene ether) **compositions**
with improved light resistance
INVENTOR(S): Inoe, Kazunari
PATENT ASSIGNEE(S): GE Plastics Japan Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08020718	A2	19960123	JP 1994-176204	1994 0706

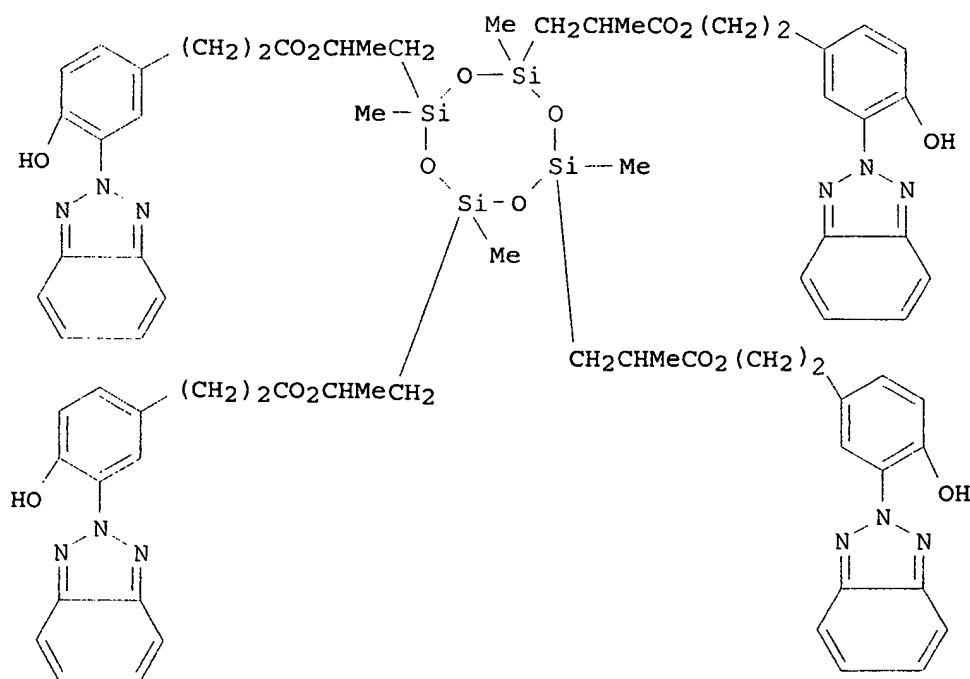
PRIORITY APPLN. INFO.:

<--
 JP 1994-176204

1994
0706

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GI



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AB Title **compsns.** comprise (A) 100 parts poly(phenylene ethers) optionally containing styrene resins and (B) 0.1-5 parts organosiloxanes having residues derived from **UV absorbers.** Thus, poly(2,6-dimethyl-1,4-phenylene) ether 40, Toporex 870ST (high-impact polystyrene) 60, a benzotriazole residue-containing cyclosiloxane I [obtained from 2-(2-hydroxy-5-methacryloyloxyethylphenyl)-2H-benzotriazole and 1,3,5,7-tetramethylcyclotetrasiloxane] 1, (PhO)₃PO 10, and TiO₂ 5 parts were melt-kneaded, pelletized, and injection molded to give a test piece showing Izod impact strength 18 kg-cm/cm, heat distortion temperature 97°, ΔE 9.8 after 100-h accelerated weathering, and yellowness index 17 initially and 31 after the

weathering.

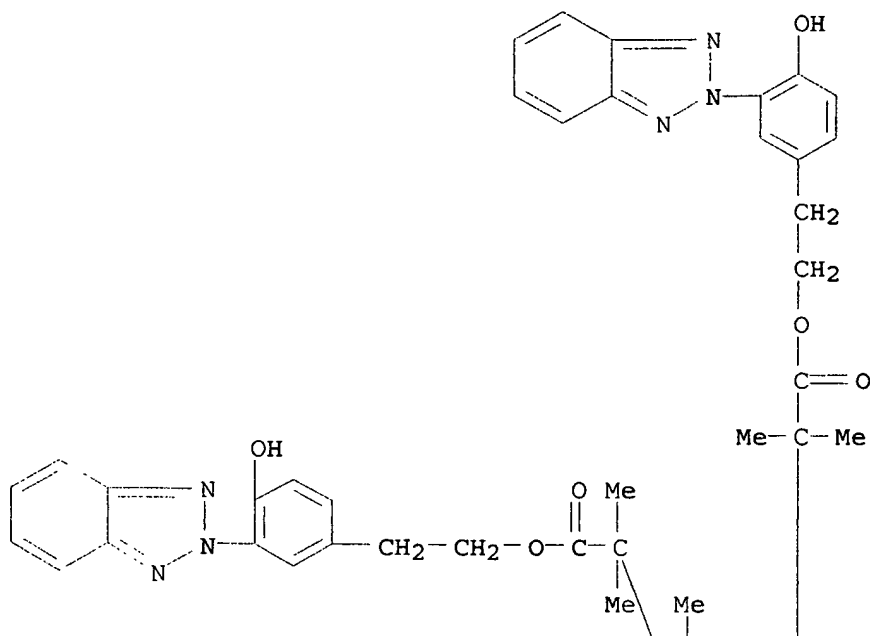
IT 175719-52-5P

(siloxanes having UV absorber residues for
poly(phenylene ethers) with improved light resistance)

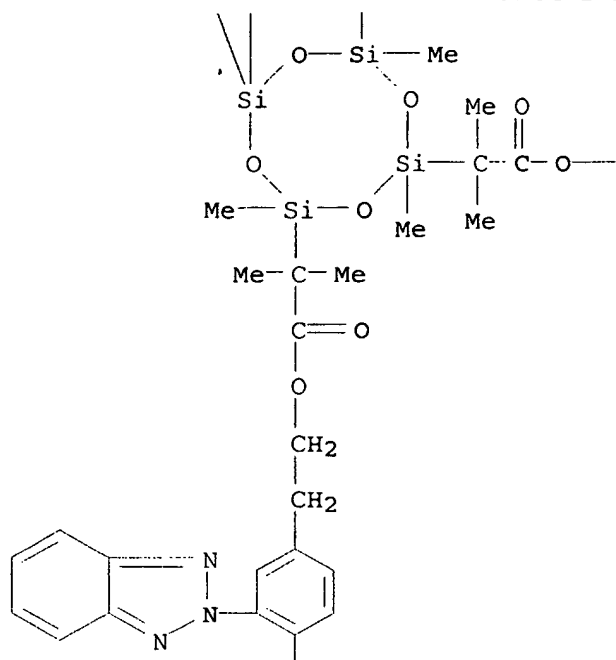
RN 175719-52-5 HCAPLUS

CN Cyclotetrasiloxane-2,4,6,8-tetraacetic acid,
 $\alpha,\alpha,\alpha',\alpha',\alpha'',\alpha'',\alpha''',\alpha'''$,
 $\alpha,\alpha,\alpha',\alpha',\alpha'',\alpha'',\alpha''',\alpha'''$,
2,4,6,8-dodecamethyl-, tetrakis[2-[3-(2H-benzotriazol-2-
yl)-4-hydroxyphenyl]ethyl] ester (9CI) (CA INDEX NAME)

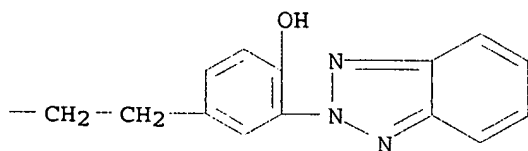
PAGE 1-A



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PAGE 2-B



PAGE 3-A



- IC ICM C08L071-12
ICS C08L071-12; C08K005-54; C08L025-04
ICI C08L071-12, C08L025-04, C08L083-05
CC 37-6 (Plastics Manufacture and Processing)
IT Plastics, molded
(polyoxyphenylene-styrene polymer blends; siloxanes having
UV absorber residues for poly(phenylene
ethers) with improved light resistance)
IT Light stabilizers
(siloxanes having **UV absorber** residues for
poly(phenylene ethers) with improved light resistance)
IT Siloxanes and Silicones, preparation
(reaction products, with benzotriazole derivs.; siloxanes

- having **UV absorber** residues for poly(phenylene ethers) with improved light resistance)
- IT 100-42-5D, Styrene, polymers 9003-53-6 (high-impact, poly(phenylene ether) blends; siloxanes having **UV absorber** residues for poly(phenylene ethers) with improved light resistance)
- IT 106974-54-3, Toporex 870ST (poly(phenylene ether) blends; siloxanes having **UV absorber** residues for poly(phenylene ethers) with improved light resistance)
- IT 2370-88-9 (precursor; siloxanes having **UV absorber** residues for poly(phenylene ethers) with improved light resistance)
- IT 96478-09-0 (siloxane derivative precursor; siloxanes having **UV absorber** residues for poly(phenylene ethers) with improved light resistance)
- IT 26403-67-8DP, reaction products with [hydroxy(methacryloyloxyethyl)phenyl]benzotriazole 49718-23-2DP, Methylsilanediol homopolymer, trimethylsilyl-terminated, reaction products with [hydroxy(methacryloyloxyethyl)phenyl]benzotriazole 96478-09-0DP, reaction products with trimethylsilyl-terminated Me hydrogen siloxane 175719-52-5P (siloxanes having **UV absorber** residues for poly(phenylene ethers) with improved light resistance)
- IT 24938-67-8, Poly[(2,6-dimethyl-1,4-phenylene) ether] 25134-01-4, 2,6-Xylenol homopolymer (siloxanes having **UV absorber** residues for poly(phenylene ethers) with improved light resistance)

L38 ANSWER 47 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:916479 HCAPLUS

DOCUMENT NUMBER: 123:317462

TITLE: Stabilization of leather against thermal and photochemical decomposition

INVENTOR(S): Wyss, Franz; Arnold, Vladimir; Dbaly, Helena; Leuschner, Gisbert; Rembold, Manfred; Puentener, Alois

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Eur. Pat. Appl., 34 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 665294	A2	19950802	EP 1995-810019	1995 0110
<--				
EP 665294	B1	19990519		
R: AT, CH, DE, FR, GB, IT, LI, NL				
AT 180283	E	19990615	AT 1995-810019	1995 0110
<--				

ZA 9500386	A	19950719	ZA 1995-386	1995 0118
AU 9510263	A1	19950803	<-- AU 1995-10263	1995 0118
AU 698396	B2	19981029	<--	
JP 07252500	A2	19951003	JP 1995-6204	1995 0119
US 5705083	A	19980106	<-- US 1996-662735	1996 0610
PRIORITY APPLN. INFO.:			<-- CH 1994-160	A 1994 0119
			<-- US 1995-371639	B1 1995 0112
			<--	

OTHER SOURCE(S): MARPAT 123:317462

AB Photochem. and thermal stabilizers for plastics, textile coatings, leather substitutes, and leather contain water-emulsifiable or -dispersible forms of com. sterically hindered amines, UV absorbers, and antioxidants, as well as water and other additives. Various **compns.** containing blends of these materials are described.

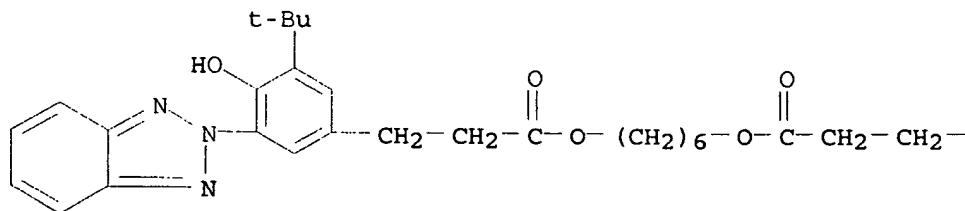
IT 84268-08-6

(photochem. and thermal stabilizers containing antioxidants and sterically hindered amines and UV absorbers for leather)

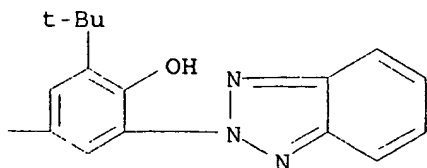
RN 84268-08-6 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 1,6-hexanediyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C14C009-00
ICS C08K005-00; D06N003-00
CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
Section cross-reference(s): 38, 40
IT 2082-79-3 2440-22-4 3147-75-9 3147-76-0 3147-77-1
3846-71-7 3864-99-1 3896-11-5 10343-56-3 23328-53-2
25305-63-9 25973-55-1 36437-37-3 41556-26-7 43224-26-6
47916-12-1 52185-71-4, 1-Benzyl-4-hydroxy-2,2,6,6-
tetramethylpiperidine 52829-07-9 68039-62-3 70321-86-7
72066-88-7 79720-19-7 83044-89-7 83044-90-0 83044-91-1
83914-74-3 **84268-08-6** 84268-23-5 84268-33-7
98447-68-8 103597-45-1 104810-48-2 121859-42-5 131747-52-9
(photochem. and thermal stabilizers containing antioxidants and
sterically hindered amines and UV absorbers for leather)

L38 ANSWER 48 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:360791 HCAPLUS

DOCUMENT NUMBER: 122:316096

TITLE: Acetal resin **compositions** with good weather resistance

INVENTOR(S): Shimizu, Kenichi; U. Ken

PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

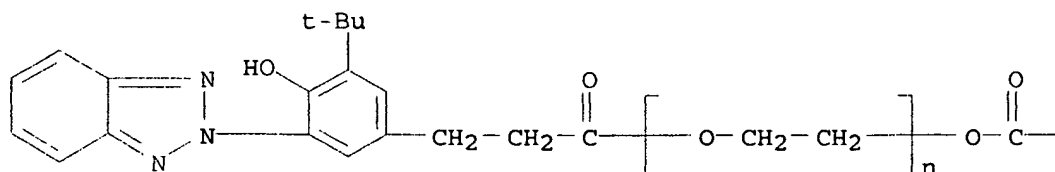
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06322228	A2	19941122	JP 1993-110291	1993 0512
JP 3214524	B2	20011002	<--	
PRIORITY APPLN. INFO.:			JP 1993-110291	1993 0512

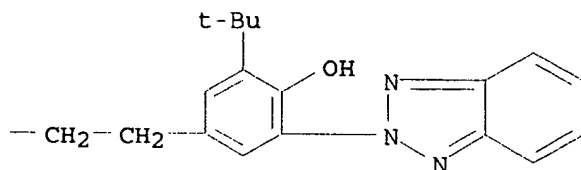
AB The title **compsns.** comprise acetal resins, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate (I), and ≥1 UV absorber selected from bis(5-benzoyl-4-hydroxy-2-methoxyphenyl)methane (II), 2-(2-hydroxy-3-dodecyl-5-methylphenyl)benzotriazole, and 3-[3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl]propionate-terminated polyethylene glycol. A **composition** contained Iupital (acetal resin) 100, I 0.10, II 1.50, melamine 0.20, and Ca stearate 0.05 part.

IT 104810-47-1
 (light stabilizers; acetal resin **compns.** containing)
 RN 104810-47-1 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- ω -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C08L059-00
 ICS C08K005-17
 CC 37-6 (**Plastics** Manufacture and Processing)
 IT Light stabilizers
 (in acetal resin **compns.** for weather resistance)
 IT 23328-53-2 41556-26-7 68716-15-4 104810-47-1
 (light stabilizers; acetal resin **compns.** containing)

L38 ANSWER 49 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:276828 HCAPLUS

DOCUMENT NUMBER: 122:57463

TITLE: Non-blooming UV-light stabilizers
 for polycarbonate resin compositions

INVENTOR(S): Umemura, Toshikazu; Kanayama, Satoshi; Takada,
 Toshiaki; Ogawa, Noryoshi

PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06145491	A2	19940524	JP 1992-294601	1992 1102
JP 3211843	B2	20010925		

PRIORITY APPLN. INFO.:

JP 1992-294601

1992
1102

AB The title compns. contain main polycarbonate resins, polycarbonates bearing benzotriazolyl UV-absorbing groups as light stabilizers, and phosphate-type and/or hindered phenol-type antioxidants. Thus, phosgenation of a mixture of bisphenol A and bis(3-(2H-benzotriazol-2-yl)-2-hydroxy-5-octylphenyl)methane gave a UV-absorbing polycarbonate 0.5 part of which was blended with 100 parts Iupilon S-3000 (a polycarbonate) and 0.1 part a hindered phenol then injection molded to give test pieces with good resistance to discolorization in a Sunshine weatherometer test.

IT 159043-45-5D, reaction products with monophenols

(UV light-absorbing; non-blooming UV-light stabilizers for polycarbonate resin compns.)

RN 159043-45-5 HCAPLUS

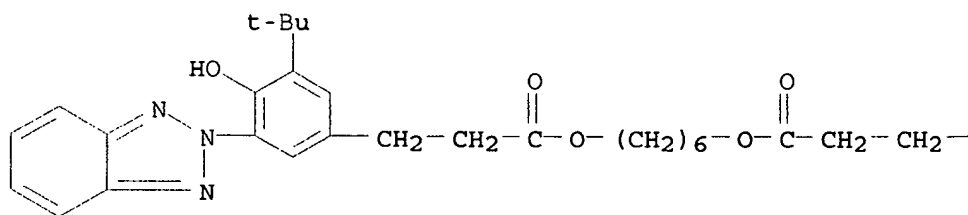
CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 1,6-hexanediyl ester, polymer with carbonic dichloride and 4,4'-(1-methylethylidene)bis[phenol] (9CI)
(CA INDEX NAME)

CM 1

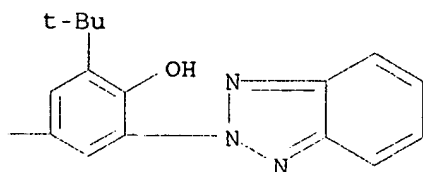
CRN 84268-08-6

CMF C44 H52 N6 O6

PAGE 1-A



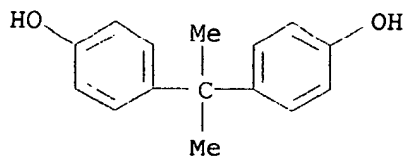
PAGE 1-B



CM 2

CRN 80-05-7

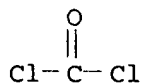
CMF C15 H16 O2



CM 3

CRN 75-44-5

CMF C Cl2 O



- IC ICM C08L069-00
ICS C08K005-13; C08K005-52
- CC 37-6 (Plastics Manufacture and Processing)
- IT Antioxidants
(non-blooming UV-light stabilizers for polycarbonate resin compns.)
- IT Polycarbonates, uses
(non-blooming UV-light stabilizers for resin compns.)
- IT Light stabilizers
(UV, non-blooming stabilizers for polycarbonate resin compns.)
- IT Phenols, uses
(hindered, non-blooming UV-light stabilizers for polycarbonate resin compns.)
- IT 24124-16-1D, reaction products with polycarbonates
159043-45-5D, reaction products with monophenols
159655-37-5D, reaction products with monophenols
(UV light-absorbing; non-blooming UV-light stabilizers for polycarbonate resin compns.)
- IT 6683-19-8, Pentaerythrityl tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate) 26741-53-7, Bis(2,4-di-tert-butylphenyl)pentaerythritol diphosphite 31570-04-4, Tris(2,4-di-tert-butylphenyl)phosphite 38613-77-3 90498-90-1
(antioxidants; non-blooming UV-light stabilizers for polycarbonate resin compns.)
- IT 98-54-4D, p-tert-Butylphenol, reaction products with polycarbonates
(non-blooming UV-light stabilizers for polycarbonate resin compns.)
- IT 24936-68-3, Iupilon S-3000, uses
(non-blooming UV-light stabilizers for polycarbonate resin compns.)

L38 ANSWER 50 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:103729 HCAPLUS

DOCUMENT NUMBER: 118:103729

TITLE: 5-Sulfonyl-substituted benzotriazole
UV absorbers and stabilized
compositions

INVENTOR(S): Winter, Roland A. E.; Von Ahn, Volker H.;

PATENT ASSIGNEE(S): Stevenson, Tyler A.; Holt, Mark S.;
 SOURCE: Ravichandran, Ramanathan
 Ciba-Geigy A.-G., Switz.
 PCT Int. Appl., 66 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9214717	A1	19920903	WO 1992-US1081	1992 0211
<--				
W: CA, JP, KR, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
US 5280124	A	19940118	US 1992-828291	1992 0205
<--				
EP 572554	A1	19931208	EP 1992-907725	1992 0211
<--				
EP 572554	B1	20000510		
R: BE, DE, ES, FR, GB, IT, NL, SE				
JP 06505743	T2	19940630	JP 1992-507280	1992 0211
<--				
JP 3180137	B2	20010625		
RU 2127264	C1	19990310	RU 1993-50567	1992 0211
<--				
CA 2098999	C	20021119	CA 1992-2098999	1992 0211
<--				
PRIORITY APPLN. INFO.:			US 1991-654155	A 1991 0212
<--				
			US 1992-828291	A2 1992 0205
<--				
			WO 1992-US1081	W 1992 0211
<--				

OTHER SOURCE(S): MARPAT 118:103729
 AB 2-(2-Hydroxyphenyl)-2H-benzotriazole UV
 absorbers substituted at the 5-position of the benzo ring
 by a -SO- or -SO₂- group are prepared, show enhanced absorption in
 the near visible range (>350 nm), and are especially effective at 0.01-5
 wt% in protecting polymers against radiation >350 nm. Thus, to an

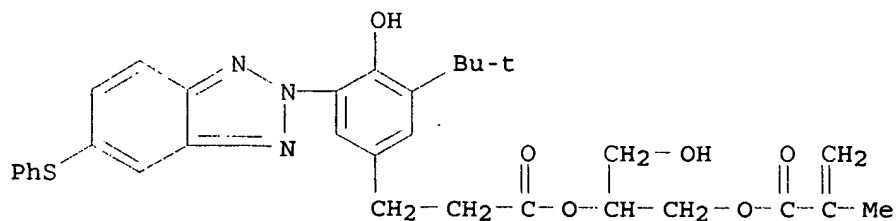
epoxy-primed steel panel was applied an acrylic melamine clearcoat containing 3 wt% 5-benzenesulfonyl-2-[2-hydroxy-3-tert-butyl-5-(β -octoxycarbonylethyl)phenyl]-2H-benzotriazole; baking 30 min. at 121°, storing 1 wk, and exposing in Florida in a black box showed 127 days before delamination.

IT 145233-64-3P

(preparation and oxidation of)

RN 145233-64-3 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(phenylthio)-2H-benzotriazol-2-yl]-, 1-(hydroxymethyl)-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



IT 146124-29-0P 146124-30-3P

(preparation of, as UV stabilizers)

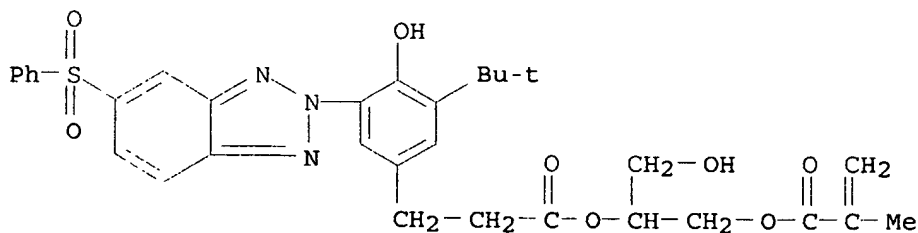
RN 146124-29-0 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(phenylsulfonyl)-2H-benzotriazol-2-yl]-, 1-(hydroxymethyl)-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(phenylsulfonyl)-2H-benzotriazol-2-yl]benzenepropanoate (9CI) (CA INDEX NAME)

CM 1

CRN 146124-28-9

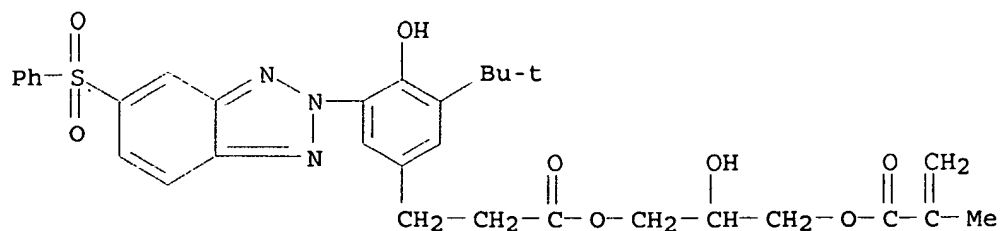
CMF C32 H35 N3 O8 S



CM 2

CRN 146124-27-8

CMF C32 H35 N3 O8 S



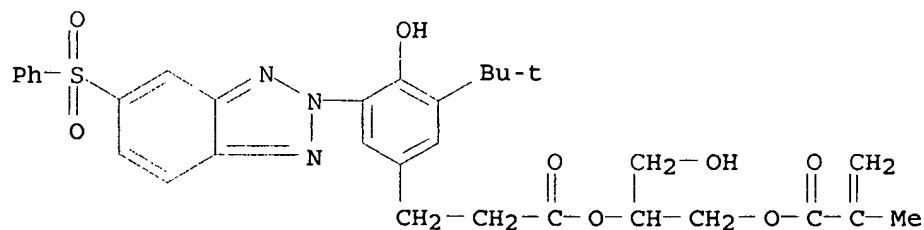
RN 146124-30-3 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(phenylsulfonyl)-2H-benzotriazol-2-yl]-, 1-(hydroxymethyl)-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(phenylsulfonyl)-2H-benzotriazol-2-yl]benzenepropanoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 146124-28-9

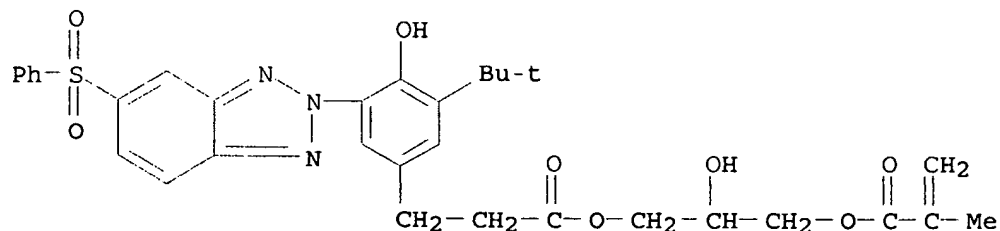
CMF C32 H35 N3 O8 S



CM 2

CRN 146124-27-8

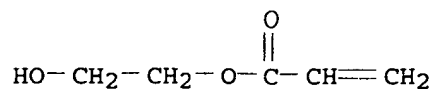
CMF C32 H35 N3 O8 S



CM 3

CRN 818-61-1

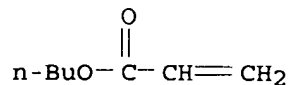
CMF C5 H8 O3



CM 4

CRN 141-32-2

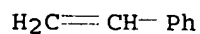
CMF C7 H12 O2



CM 5

CRN 100-42-5

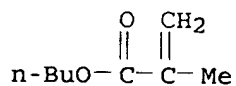
CMF C8 H8



CM 6

CRN 97-88-1

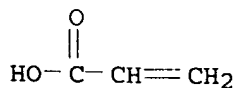
CMF C8 H14 O2



CM 7

CRN 79-10-7

CMF C3 H4 O2



IC ICM C07D249-20

ICS C07F009-6518; C07F007-18; C08G065-32; C08F220-38;
C08K005-3475

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 28, 42

ST hydroxyphenylbenzotriazole **UV absorber**

coating; stabilizer light benzotriazole plastic

IT Epoxy resins, miscellaneous

(UV absorbers for, sulfonyl-containing
benzotriazoles as)

IT Coating materials
(primers, topcoats for, containing sulfonyl-containing benzotriazoles
as UV absorbers)

IT Coating materials
(transparent, UV absorbers for,
sulfonyl-containing benzotriazoles as)

IT 145233-53-0P 145233-57-4P 145233-59-6P 145233-61-0P
145233-63-2P 145233-64-3P

(preparation and oxidation of)

IT 145233-54-1P 145233-55-2P 145233-56-3P 145233-58-5P
145233-60-9P 145233-62-1P 145233-65-4P 145233-66-5P

146124-29-0P 146124-30-3P

(preparation of, as UV stabilizers)

L38 ANSWER 51 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:534292 HCAPLUS

DOCUMENT NUMBER: 113:134292

TITLE: UV-stabilized melamine-polyol coatings for
thermoplastic substrates

INVENTOR(S): Moore, James E.; Factor, Arnold; Miranda,
Peter M.

PATENT ASSIGNEE(S): General Electric Co., USA

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

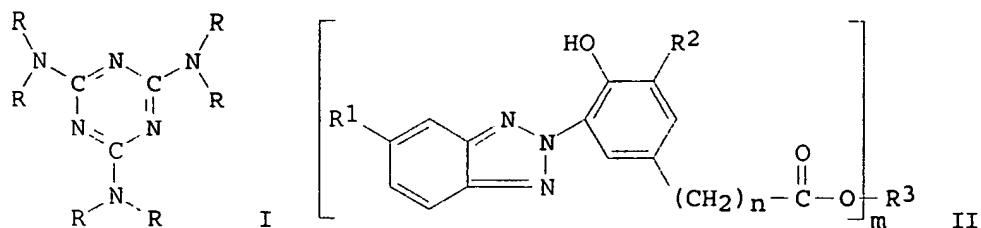
English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
US 4913974	A	19900403	US 1987-140109	1987 1231
EP 386298	A1	19900912	EP 1989-104234	1989 0310
R: DE, FR, GB, IT, NL JP 02248469	A2	19901004	JP 1989-58036	1989 0313
PRIORITY APPLN. INFO.:			US 1987-140109	1987 1231

GI



AB UV-resistant coatings, useful for protecting thermoplastic resins, especially polycarbonates against UV degradation, comprise (A) 20-80% melamine compound [I; R = H, CH₂OH, CH₂O(CH₂)_xH; x = 1-4]; (B) 80-20% polyol; and (C) UV absorber II (R₁ = H, halogen, C₁-6-alkyl, or a C₁-6-alkoxy; R₂ = H, halogen, C₁-6-alkyl, or a C₆-10 arylsulfonyl; n = 1-4, m = 3; and R₃ = trivalent hydrocarbyl or C₂-22-alkyl ether). Thus, a blend of 90 parts Cymel 301 and 180 parts LS 73 (an acrylic polyol) was catalyzed with 3.75 parts of 40% p-toluenesulfonic acid solution in iso-PrOH premixed with 0.8 part Et₃N was diluted with 330 parts of a 4:1 mixture of 2-butoxyethanol and propylene glycol Me ether. The blend was then mixed with 10 parts of an 90% solution of 3-(3-tert-butyl-4-hydroxybenzotriazole-2-yl)propionic acid triethylene glycol diester in PhMe to form a coating **composition**. Lexan polycarbonate panels were coated with the **composition** and cured at 125° for 2 h showing retained UV absorbers 97%, and 95.9% after addnl. 48 h at 125°, compared with 24 and 11.1, resp., for a similar **composition** containing Tinuvin P instead of III.

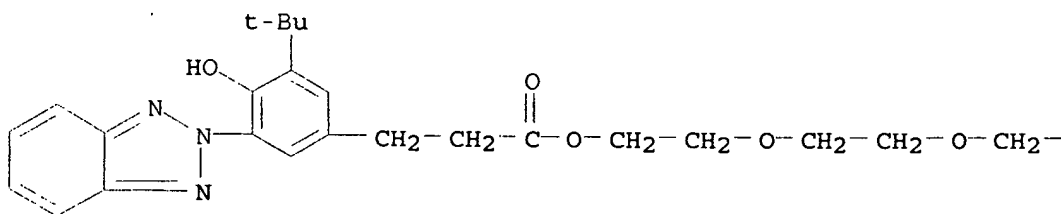
IT 125370-29-8

(UV absorbers, coatings containing, for thermoplastics)

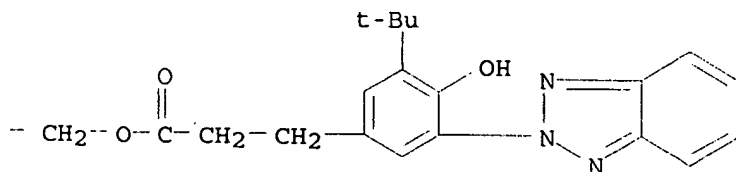
RN 125370-29-8 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



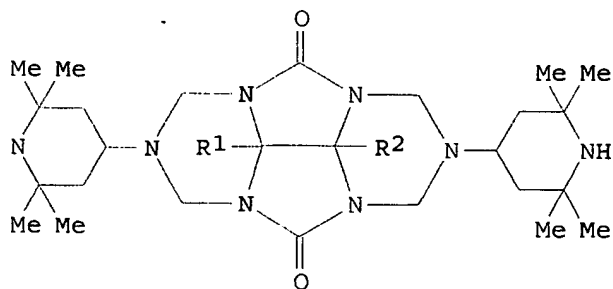
PAGE 1-B



IC ICM B32B027-36
ICS C08G012-32
INCL 428480000
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 38
IT 125370-29-8
(UV absorbers, coatings containing, for thermoplastics)
IT 24936-68-3, Lexan, uses and miscellaneous
(coatings for, UV-stabilized melamine-polyol compns.
as, light-resistant)

L38 ANSWER 52 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:498410 HCAPLUS
DOCUMENT NUMBER: 111:98410
TITLE: Stabilizer mixtures for polyarethanes
INVENTOR(S): Neumann, Peter; Aumueeller, Alexander; Trauth,
Hubert; Matzke, Guenter
PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3725926	A1	19890216	DE 1987-3725926	1987 0805
PRIORITY APPLN. INFO.:				DE 1987-3725926 1987 0805
OTHER SOURCE(S):				MARPAT 111:98410

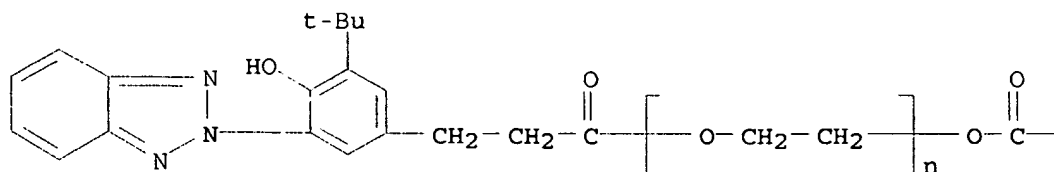


AB The title compns. contain the hindered amines I (R1, R2 = H, Me, Ph) and UV absorbers and/or antioxidants (hindered phenols, phosphites, and/or Vitamin E or derivs.). A polyoxyalkylene-polyurethane containing I (R1, R2 = H) 0.5,

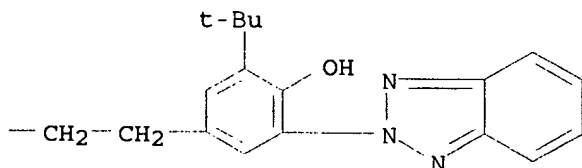
3-[3-benzotriazol-2-yl-5-tert-butyl-4-hydroxyphenyl]propionic acid polyethylene glycol ester 0.5, and 1:10 α -tocophenol-tris(nonylphenyl) phosphite mixture 0.25% had yellowness index 4.4 and 14.7 after 0 and 48 h, resp., of Xenotesting; vs. 4.8 and 19.7, resp., with a conventional benzotriazole-hindered phenol-hindered amine stabilizer.

IT 104810-47-1
(light stabilizers containing, nondiscoloring, for polyurethanes)
RN 104810-47-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- ω -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C08L075-04
ICS C08K005-00
ICA C08G018-00; C09K015-08; C09K015-30; C09K015-32
ICI C07D487-22, C07D251-00, C07D235-00; C08K005-00, C08K005-34, C08K005-13, C08K005-52, C08K005-15; C08J003-20, C08L075-04, C08K005-00; C08J007-00, C08L075-04, C08K005-00
CC 37-6 (Plastics Manufacture and Processing)
IT Urethane polymers, uses and miscellaneous
(polyoxyalkylene-, light stabilizers and antioxidants for, nondiscoloring **compns.** as)
IT Discoloration prevention
(yellowing, antioxidant-light stabilizer **compns.** for, for polyurethanes)
IT 104810-47-1 104810-48-2 109423-00-9
(light stabilizers containing, nondiscoloring, for polyurethanes)

L38 ANSWER 53 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:194760 HCAPLUS

DOCUMENT NUMBER: 110:194760

TITLE: Benzotriazole light stabilizers for thermosetting resin coatings

INVENTOR(S): Yagi, Masaki; Nakahara, Yutaka; Takatori, Katsuyuki; Nakajima, Toshio

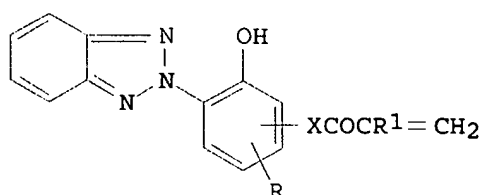
PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63205334	A2	19880824	JP 1987-36935	1987 0220

PRIORITY APPLN. INFO.: <--
 JP 1987-36935
 1987
 0220

GI

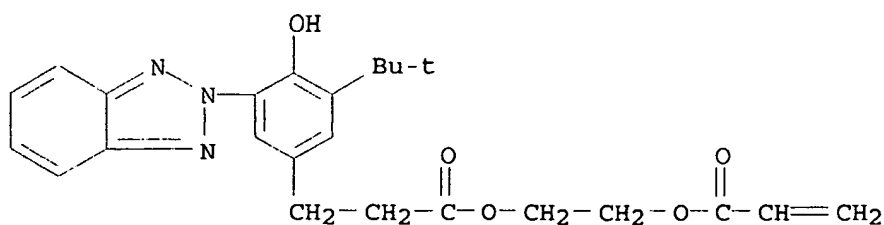


AB Title stabilizers are composed of benzotriazoles I [R = H, alkyl; R1 = H, Me; X = O, CH2NH, OCH2CH2O, OCH2CH(OH)CH2O, CH2O, CH2CH2O, CH2CH2CO2CH2CH2O, CH2CH2CO2CH2CH(OH)CH2O]. A primed steel plate was sprayed with a base coating **composition** containing Bu acrylate (II)-2-hydroxyethyl methacrylate (III)-methacrylic acid (IV)-Me methacrylate (V) copolymer, U-Van 20SE60, cellulose acetate butyrate, Alpaste 1123N, xylene, AcOBu, and Cu phthalocyanine blue, left for 10 min, sprayed with a top coating **composition** containing II-III-IV-V-[2-hydroxy-3-(acryloylaminomethyl)-5-methylphenyl]benzotriazole (VI) copolymer, U-Van 20SE60, xylene, and Bu glycol acetate, and baked 30 min at 140° to form a coating, which cracked after 2500 h in weather-o-meter test, vs., 1600 for the coating prepared without VI.

IT 120303-69-7
 (crosslinking agents, with melamine resins, for coconut oil-modified alkyd resin coatings, weather-resistant)

RN 120303-69-7 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)



IC ICM C08K005-34
 ICS C08K005-34
 CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 37
 IT 3234-16-0 3234-22-8 20952-85-6 24802-38-8 25177-21-3
 47658-69-5 107479-06-1 120284-05-1 120284-06-2
 120303-69-7 120326-78-5

(crosslinking agents, with melamine resins, for coconut
 oil-modified alkyd resin coatings, weather-resistant)

L38 ANSWER 54 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:40188 HCAPLUS

DOCUMENT NUMBER: 110:40188

TITLE: Ultraviolet-absorbing polyamide or polyester
 material **compositions** with improved
 durability

INVENTOR(S): Ozawa, Akihiro

PATENT ASSIGNEE(S): Morisawa and Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 63172729	A2	19880716	JP 1987-2762	1987 0109

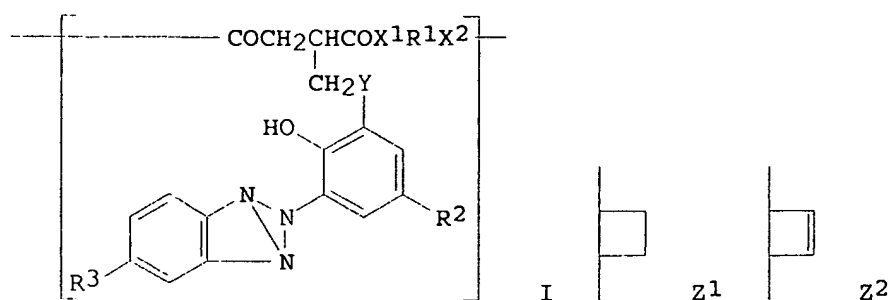
PRIORITY APPLN. INFO.:

<--
 JP 1987-2762

1987
0109

GI

<--



AB Title **compns.** having repeating units I [R1 = residue of divalent alc. or amine; R2 = (ar)alkyl; R3 = H, halo, alkyl; X1-2 = O, NR4; R4 = H, alkyl, aryl; Y = CH2CH2, Z1-2] are prepared Thus, 2-(2-hydroxy-3-allyl-5-methylphenyl)benzotriazole and di(hydroxyethyl) maleate were reacted and hydrogenated and 10 g of the product was polymerized with 90 g bis(β -hydroxyethyl) terephthalate in the presence of Sb2O3 in vacuo at 290° and cut to give a chipped copolymer with average mol. weight ≥ 5000 and softening point 190-200°, which was pressed to give 2 0.1-mm films. A red cellophane membrane was sandwiched between the films then UV-irradiated at 80° for 300 h to show 8% color degradation, vs. 60 for the membrane treated similarly using PET films instead.

IT 118240-34-9P 118240-35-0P

(UV absorbers, preparation of, with improved durability)

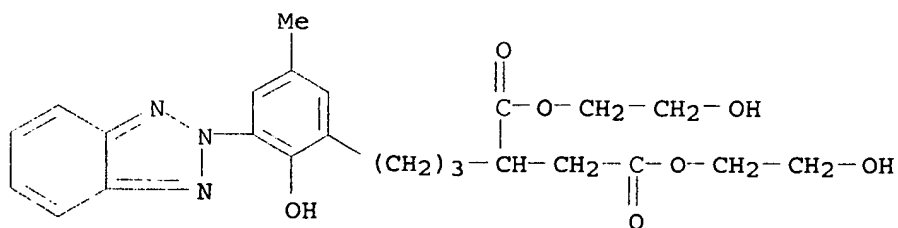
RN 118240-34-9 HCAPLUS

CN Butanedioic acid, [3-[3-(2H-benzotriazol-2-yl)-2-hydroxy-5-methylphenyl]propyl]-, bis(2-hydroxyethyl) ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 118240-33-8

CMF C24 H29 N3 O7



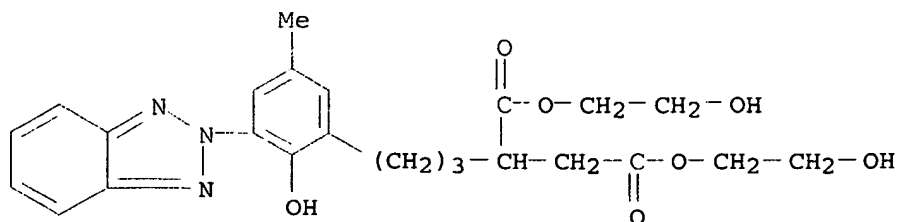
RN 118240-35-0 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, bis(2-hydroxyethyl) ester, polymer with bis(2-hydroxyethyl) [3-[3-(2H-benzotriazol-2-yl)-2-hydroxy-5-methylphenyl]propyl]butanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 118240-33-8

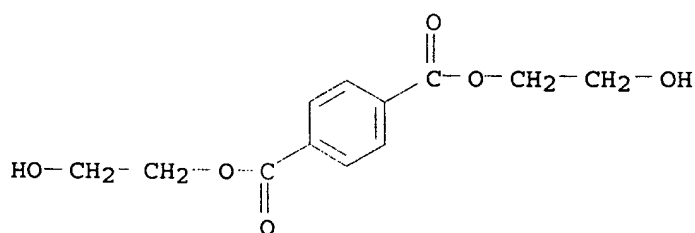
CMF C24 H29 N3 O7



CM 2

CRN 959-26-2

CMF C12 H14 O6



- IC ICM C08G063-68
ICS C08G063-68; C08G069-26; C08L101-00
CC 38-3 (Plastics Fabrication and Uses)
ST polyester film **UV absorber** durability;
polyamide film **UV absorber** durability;
allylphenylbenzotriazole hydroxyethyl maleate adduct copolymer;
hydroxyethyl terephthalate copolymer **UV absorber**
IT Polyamides, preparation
Polyesters, preparation
(**UV absorbers**, preparation of, with improved durability)
IT 118240-34-9P 118240-35-0P 118240-37-2P
118240-38-3P
(**UV absorbers**, preparation of, with improved durability)
IT 9002-88-4, Polyethylene
(films, containing polyester or polyamide **UV-absorbers**, with improved durability)

L38 ANSWER 55 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:550743 HCAPLUS

DOCUMENT NUMBER: 109:150743

TITLE: Light stabilizers for polymer compositions

INVENTOR(S): Ozawa, Akihiro

PATENT ASSIGNEE(S): Morisawa and Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63099247	A2	19880430	JP 1986-246330	1986 1016

PRIORITY APPLN. INFO.:

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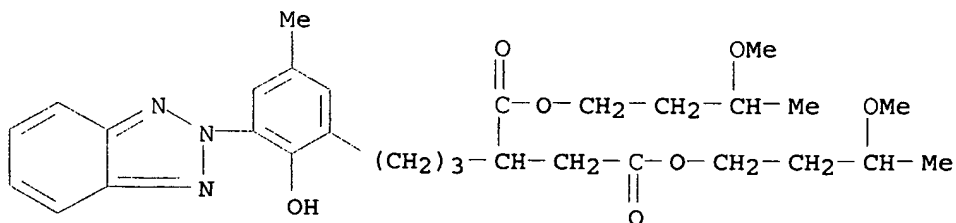
JP 1986-246330
1986
1016

AB Polymers containing or reacted with 2-[2-hydroxy-3-hydrocarbyl-5-a(r)alkylphenyl]benzotriazole derivs. have good light resistance. Solvesso 150 solution containing 265 g 2-(2-hydroxy-3-allyl-5-methylphenyl)benzotriazole and 147 g maleic anhydride was refluxed 40 h at 190° to give a maleated compound, and reacted (36.3 g) 6 h at 120° with 12 g cyclohexanol in Solvesso 150 to give a stabilizer, which (0.3 part) was mixed with PVC 100, DOP 48, and additives 3.6 part and molded to give a 1-mm film having light resistance 520 h, vs. 310 for a film without the stabilizer.

IT 116925-89-4 116925-90-7 116925-91-8
(light stabilizers, for plastics)

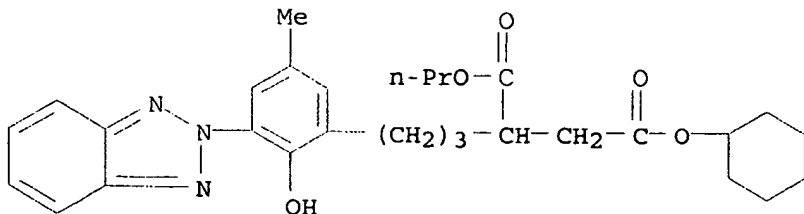
RN 116925-89-4 HCAPLUS

CN Butanedioic acid, [3-[3-(2H-benzotriazol-2-yl)-2-hydroxy-5-methylphenyl]propyl]-, bis(3-methoxybutyl) ester (9CI) (CA INDEX NAME)



RN 116925-90-7 HCAPLUS

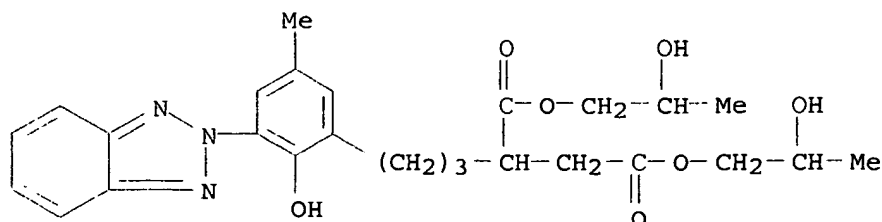
CN Butanedioic acid, [3-[3-(2H-benzotriazol-2-yl)-2-hydroxy-5-methylphenyl]propyl]-, 4-cyclohexyl 1-propyl ester (9CI) (CA INDEX NAME)



RN 116925-91-8 HCAPLUS

CN Butanedioic acid, [3-[3-(2H-benzotriazol-2-yl)-2-hydroxy-5-methylphenyl]propyl]-, bis(2-hydroxypropyl) ester (9CI) (CA INDEX NAME)

NAME)



IC ICM C08K005-34
 ICS C08K005-34; C08L023-12; C08L027-06; C09D005-38
 CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 42
 IT 116737-22-5 116737-23-6 116853-50-0 116853-51-1
 116853-52-2 116925-89-4 116925-90-7
 116925-91-8 116925-92-9
 (light stabilizers, for plastics)

L38 ANSWER 56 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1988:438814 HCAPLUS
 DOCUMENT NUMBER: 109:38814
 TITLE: Stabilization of polyurethane systems against
 photooxidative influences
 AUTHOR(S): Stohler, Felix R.; Berger, Kurt
 CORPORATE SOURCE: CIBA-GEIGY Ltd., Basel, CH-4002, Switz.
 SOURCE: Angewandte Makromolekulare Chemie (1988),
 158-159, 233-46
 CODEN: ANMCBO; ISSN: 0003-3146

DOCUMENT TYPE: Journal
 LANGUAGE: German

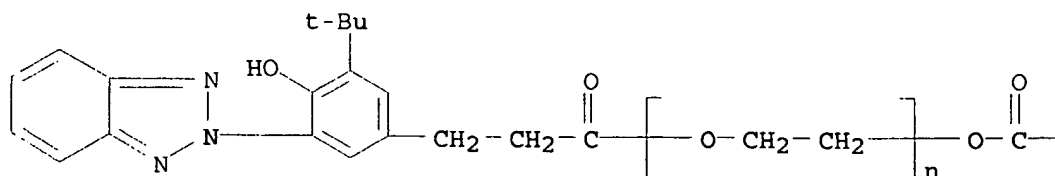
AB The stabilization of polyurethane coatings and foams and
 thermoplastics by hindered amine light stabilizers, UV absorbers,
 phenolic antioxidants, and phosphonites was studied. The
 piperidine derivative light stabilizers had the greatest effect.

IT 104810-47-1
 (light stabilizers, for polyurethanes)

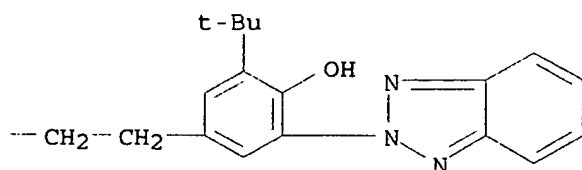
RN 104810-47-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- ω -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]- (9CI) (CA INDEX NAME)

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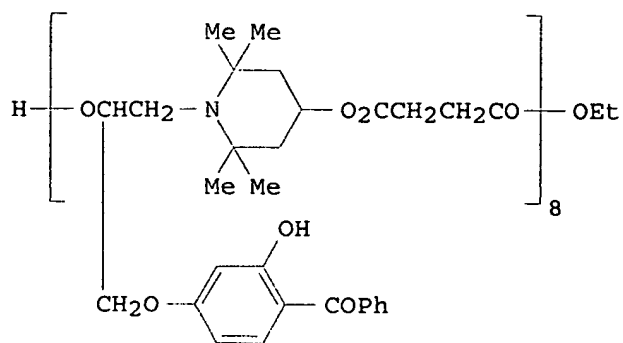
CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 42
 IT Shoes
 (soles, polyurethane compns. for, light stabilization
 of, systems for)
 IT 6683-19-8 36443-68-2 68407-88-5
 (light stabilizer compns. containing, for polyurethanes)
 IT 2440-22-4, 2-(2-Hydroxy-5-methylphenyl)benzotriazole 25973-55-1
 41556-26-7, Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate
 52829-07-9 104810-47-1 104810-48-2 115111-09-6
 115235-92-2D, esters
 (light stabilizers, for polyurethanes)

L38 ANSWER 57 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1984:492151 HCAPLUS
 DOCUMENT NUMBER: 101:92151
 TITLE: Stabilized synthetic resin
 compositions
 PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59043061	A2	19840309	JP 1982-154850	1982 0906
JP 02018346	B4	19900425	JP 1982-154850	1982 0906

PRIORITY APPLN. INFO.: <--

GI



AB Compds. having 2,2,6,6-tetramethylpiperidyl groups and 2-hydroxybenzophenone-4-yl groups (0.001-10 parts) are added to 100 parts synthetic resins to improve light resistance. Thus, a sheet prepared from polypropylene [9003-07-0] 100, stearyl β-3,5-di-tert-butyl-4-hydroxyphenylpropionate 0.2, and I [91499-45-5] 0.3 part had light resistance 720 h, compared with 450 h for a sheet containing 0.15 part 2-hydroxy-4-methoxybenzophenone and 0.15 part di-Me succinate-1-(2-hydroxyethyl)-2,2,6,6-tetramethyl-4-hydroxypiperidine condensate as the light stabilizers.

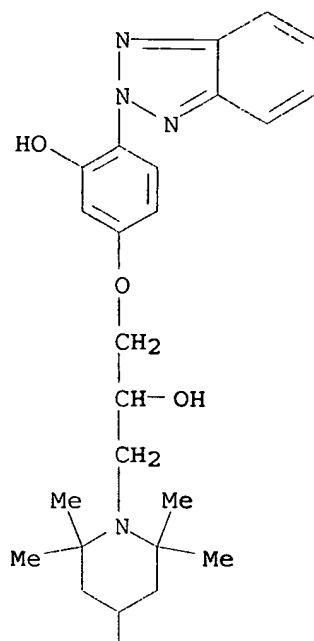
IT 91454-00-1 91454-02-3 91454-03-4
91454-04-5

(light stabilizers, for polymers)

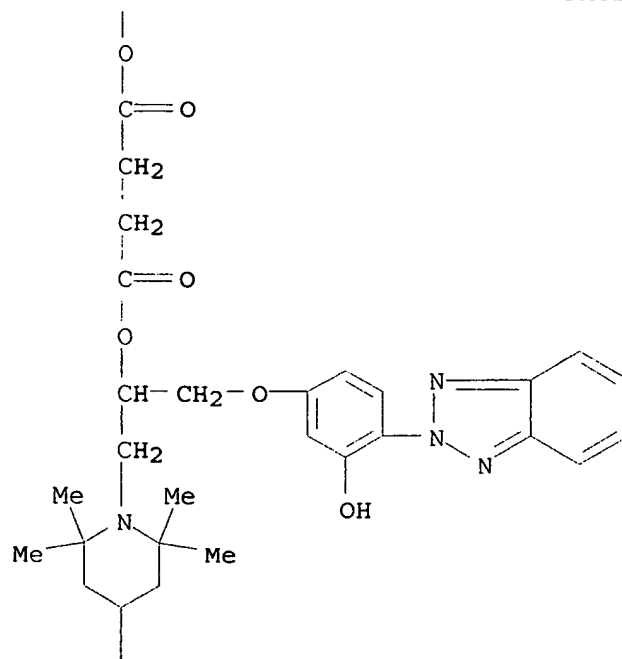
RN 91454-00-1 HCAPLUS

CN Butanedioic acid, 1-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-[4-[[1-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-[4-[[1-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl]-2,2,6,6-tetramethyl-4-piperidinyl]oxy]-1,4-dioxobutoxy]propyl]-2,2,6,6-tetramethyl-4-piperidinyl]oxy]-1,4-dioxobutoxy]propyl]-2,2,6,6-tetramethyl-4-piperidinyl 2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[4-(4-methoxy-1,4-dioxobutoxy)-2,2,6,6-tetramethyl-1-piperidinyl]methyl]ethyl ester (9CI) (CA INDEX NAME)

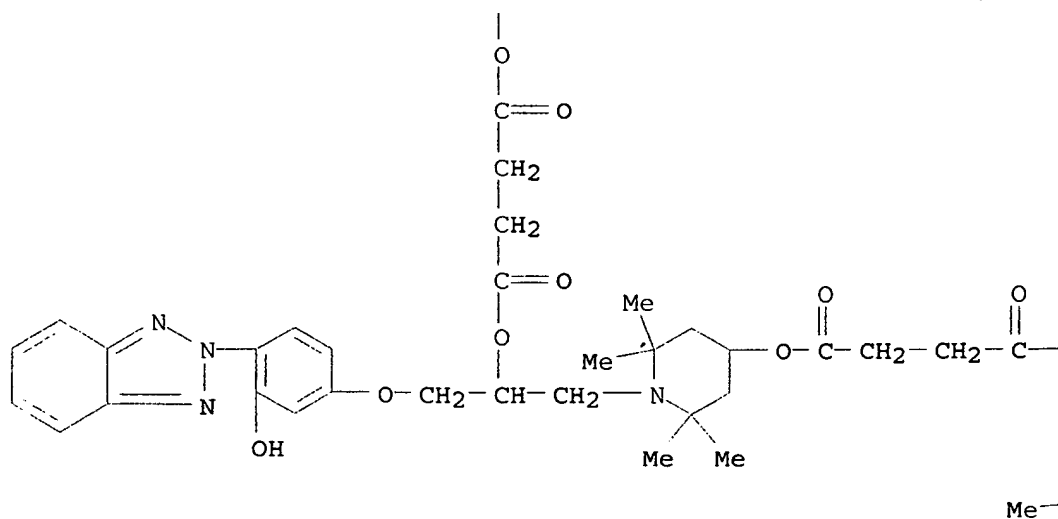
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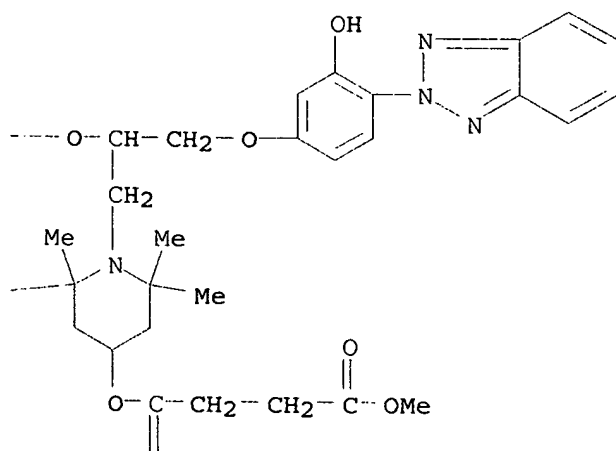
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PAGE 3-A



PAGE 3-B



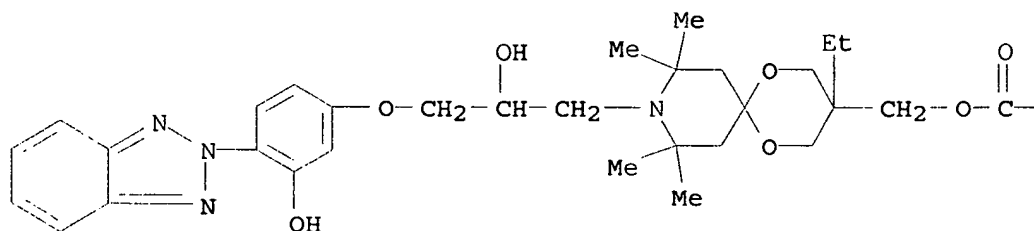
PAGE 4-B



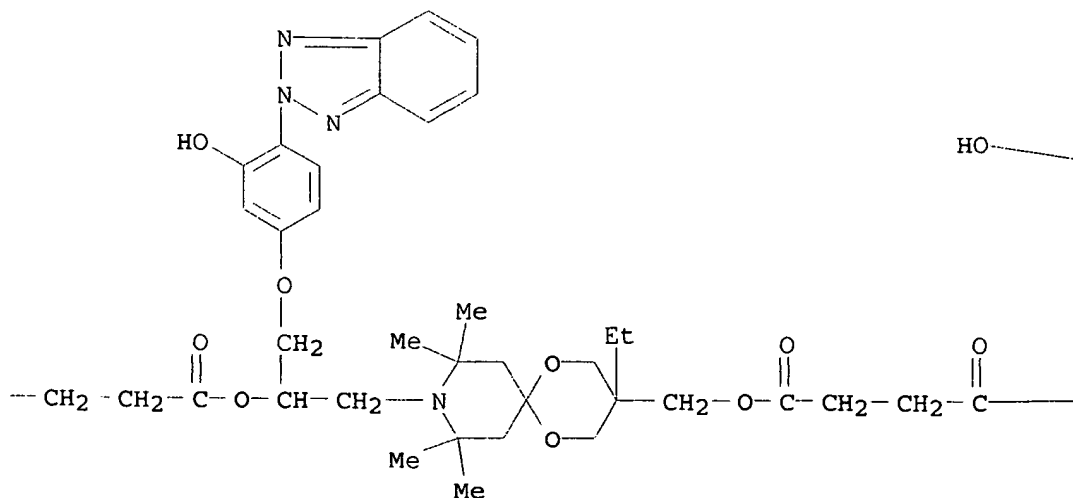
RN 91454-02-3 HCAPLUS
 CN Butanedioic acid, [9-[3-[4-(2H-benzotriazol-2-yl)-3-

hydroxyphenoxy]-2-[4-[[9-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-[4-[[9-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxo-9-azaspiro[5.5]undec-3-yl]methoxy]-1,4-dioxobutoxy]propyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxo-9-azaspiro[5.5]undec-3-yl]methoxy]-1,4-dioxobutoxy]propyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxo-9-azaspiro[5.5]undec-3-yl]methyl 2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[3-[[4-[2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[3-ethyl-3-[(4-methoxy-1,4-dioxobutoxy)methyl]-8,8,10,10-tetramethyl-1,5-dioxo-9-azaspiro[5.5]undec-9-yl]methyl]ethoxy]-1,4-dioxobutoxy]methyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxo-9-azaspiro[5.5]undec-9-yl]methyl]ethyl ester (9CI) (CA INDEX NAME)

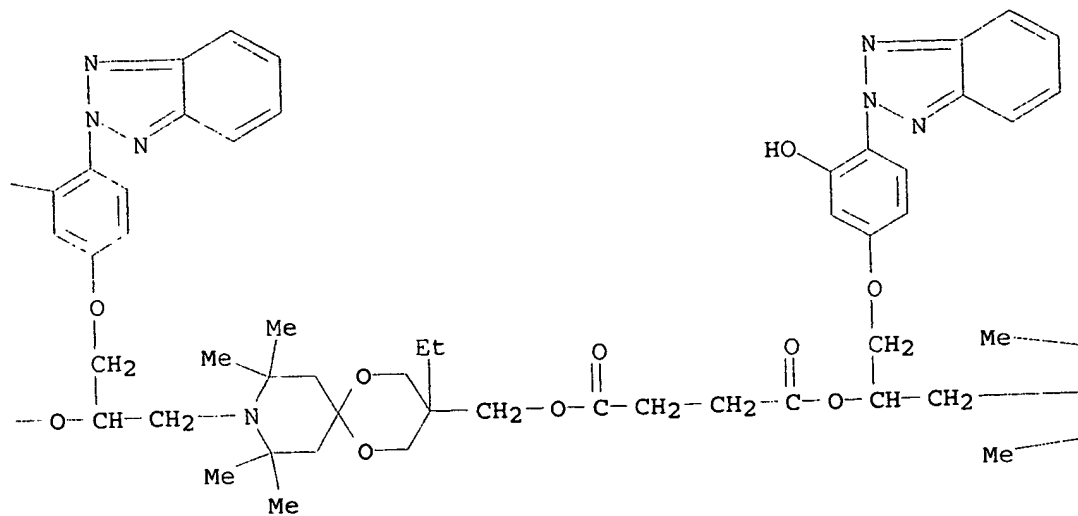
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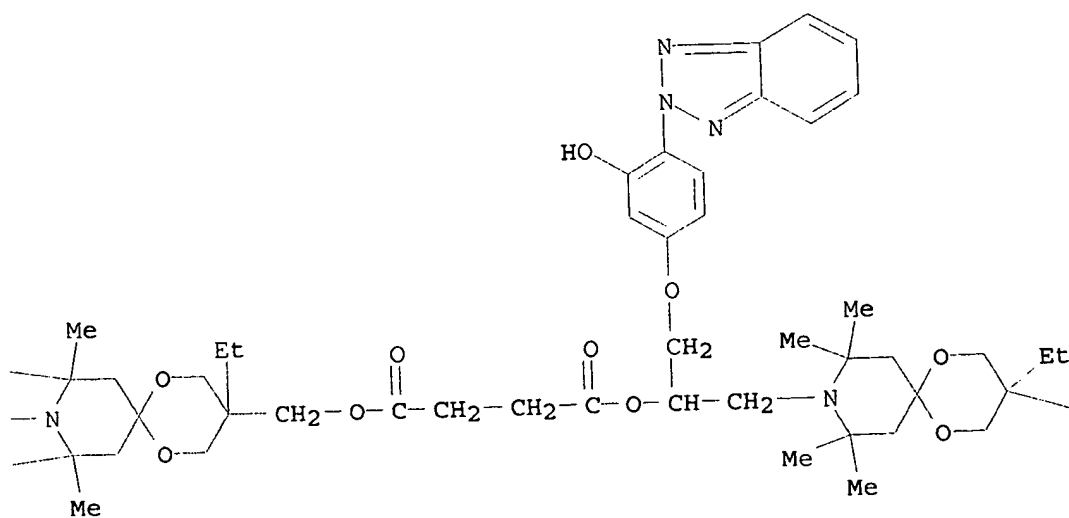
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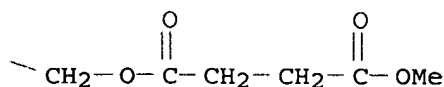
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PAGE 1-D



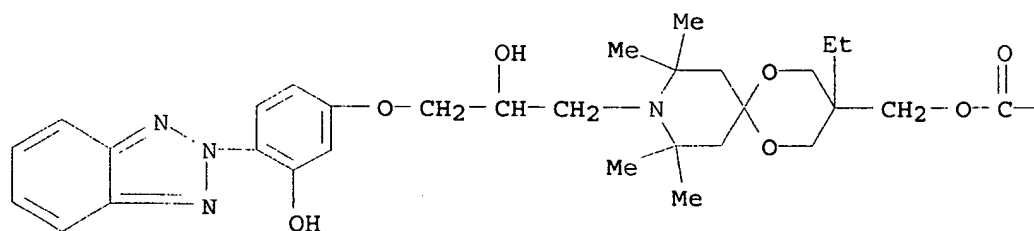
PAGE 1-E



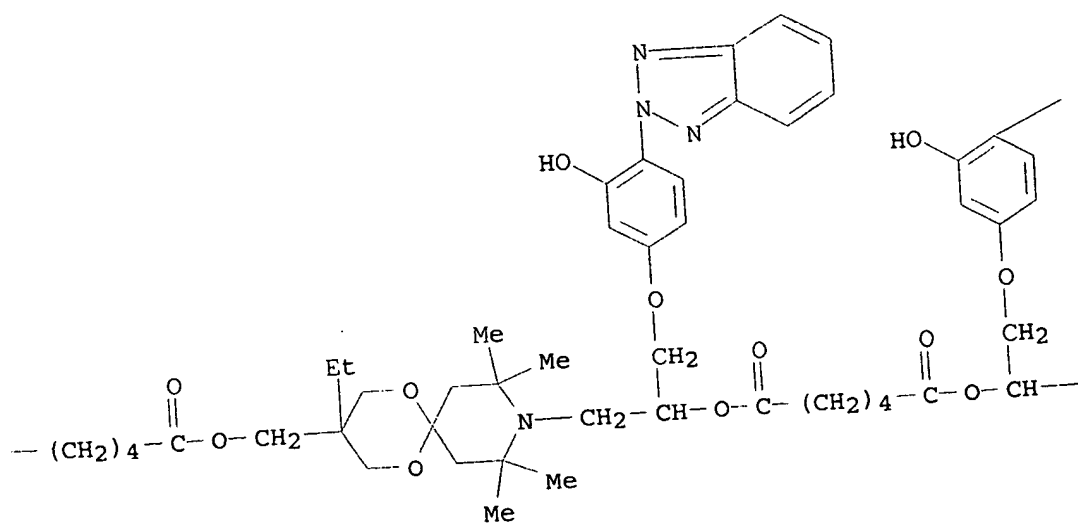
RN 91454-03-4 HCAPLUS

CN Hexanedioic acid, bis[2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[3-[[[6-[[9-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxo-9-azaspiro[5.5]undec-3-yl]methoxy]-1,6-dioxohexyl]oxy]methyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxo-9-azaspiro[5.5]undec-9-yl]methyl]ethyl] ester (9CI) (CA INDEX NAME)

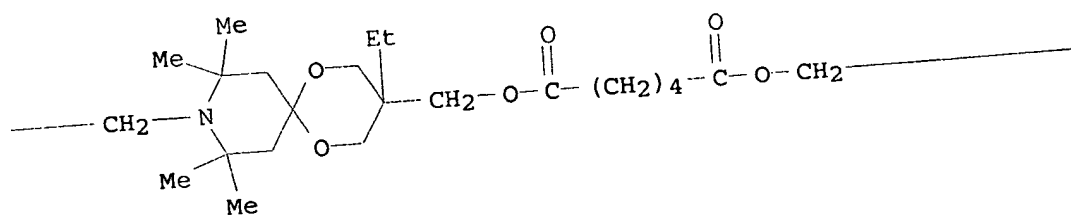
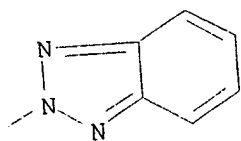
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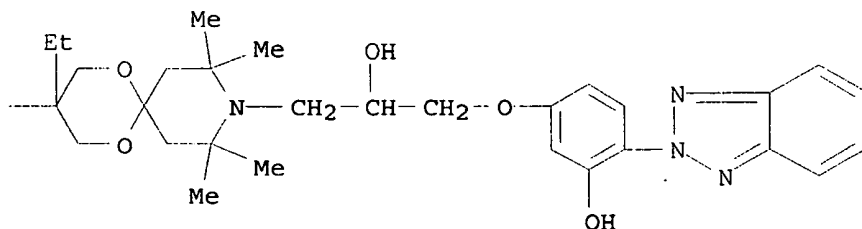
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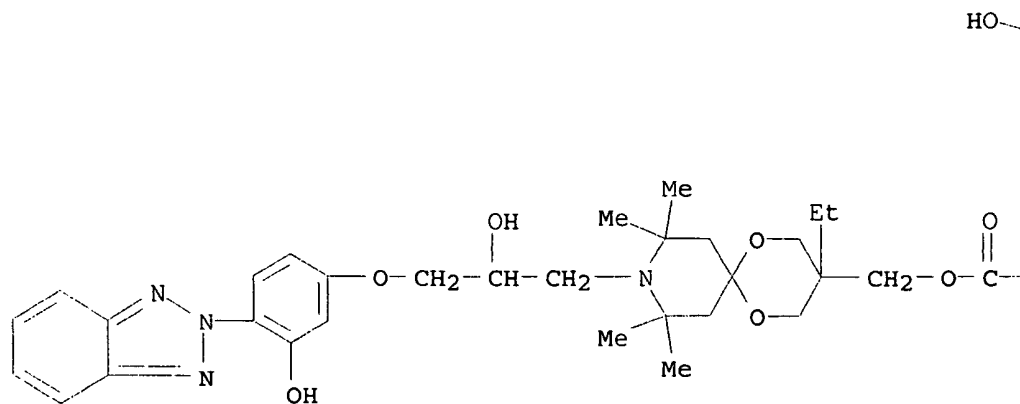
PAGE 1-D



RN 91454-04-5 HCAPLUS

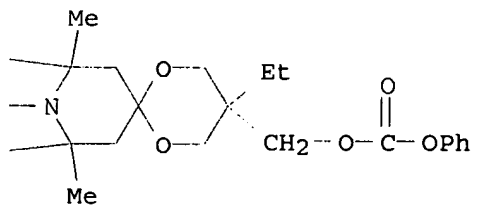
CN Carbonic acid, [9-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-
 [[[9-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-[[[9-[3-[4-
 (2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl]-3-ethyl-
 8,8,10,10-tetramethyl-1,5-dioxo-9-azaspiro[5.5]undec-3-
 yl]methoxy]carbonyl]oxy]propyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-
 dioxo-9-azaspiro[5.5]undec-3-yl]methoxy]carbonyl]oxy]propyl]-3-
 ethyl-8,8,10,10-tetramethyl-1,5-dioxo-9-azaspiro[5.5]undec-3-
 yl]methyl 2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[3-
 [[[2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[3-ethyl-
 8,8,10,10-tetramethyl-3-[(phenoxycarbonyl)oxy]methyl]-1,5-dioxo-9-
 azaspiro[5.5]undec-9-yl]methyl]ethoxy]carbonyl]oxy]methyl]-3-ethyl-
 8,8,10,10-tetramethyl-1,5-dioxo-9-azaspiro[5.5]undec-9-
 yl]methyl]ethyl ester (9CI) (CA INDEX NAME)

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USHA SHRESTHA EIC 1700 REM 4B28

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IC C08L101-00; C08K005-34
 CC 37-6 (Plastics Manufacture and Processing)
 IT 91453-94-0 91453-95-1 91453-96-2 91453-97-3 91453-98-4
 91453-99-5 91454-00-1 91454-01-2 91454-02-3
 91454-03-4 91454-04-5 91454-05-6 91454-09-0
 91454-10-3 91454-11-4 91454-12-5 91454-13-6 91454-14-7
 91459-92-6 91499-45-5 91700-70-8
 (light stabilizers, for polymers)



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Team: ZZZFEP
Dossier: 10325465

Legal Date: 09-19-2006

No.	Doccode	Number of pages
1	CTNF	17
2	1449	7
3	892	1
4	NPL	9
5	NPL	8
6	NPL	9
7	BIB	1
8	FWCLM	1
9	SRFW	1

Total number of pages: 54

Remarks:

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